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Everyday Life in Roman Britain

By MARJORIE AND C. H. B. QUENNELL

EVERYDAY THINGS IN ENGLAND

EVERYDAY LIFE IN THE OLD STONE AGE

EVERYDAY LIFE IN THE NEW STONE, BRONZE AND EARLY IRON AGES

EVERYDAY LIFE IN ROMAN BRITAIN

EVERYDAY LIFE IN ANGLO-SAXON, VIKING AND NORMAN TIMES

EVERYDAY LIFE IN HOMERIC GREECE

EVERYDAY THINGS IN ARCHAIC GREECE

EVERYDAY THINGS IN CLASSICAL GREECE

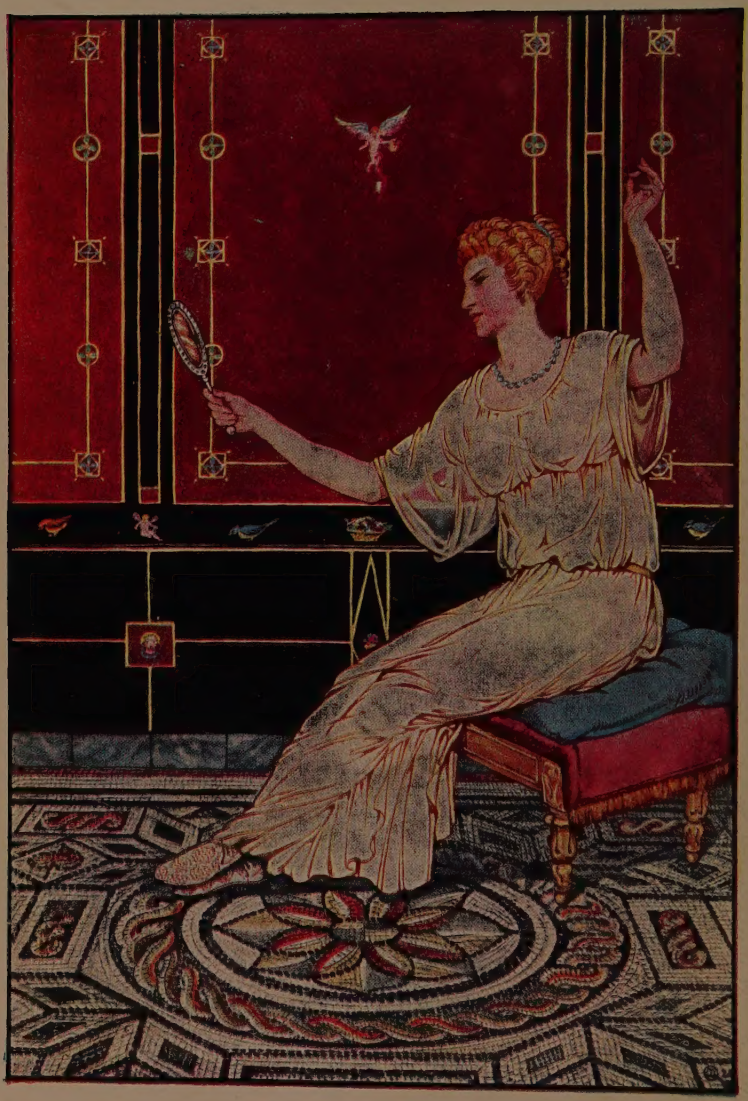

FIG. 1.—The Mirror.

Everyday Life in Roman Britain

DALMERTON TRUST FUND

By

Marjorie and C. H. B. Quennell

Authors of "Everyday Things in England"

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"And I would lay this charge on his daughter and his wife—so to reverence the memory of their father, and husband, that they revolve within them all that he said and did, and to cherish the form and the fashion of his soul, rather than of his body; it is not that I would forbid the making of statues, shaped in marble or bronze, but that as the human face, so is its copy—futile and perishing, while the form of the mind is eternal, to be expressed, not through the alien medium of art and its material, but severally by each man in the fashion of his own life."

TACITUS
From the Epilogue of *Agricola*

INTRODUCTION

THE boys and girls for whom we write may have read the *Life of Agricola*, by Tacitus, and so know the fine Epilogue with which it closes. We have given a part of this on a preceding page.

Tacitus was writing of the character of his father-in-law, Agricola, and gave us at the same time a hint of what we should look for in History. If only the spirit is eternal, it is very obvious that we must make diligent search for the principles which have animated men in the past and helped them to fashion their souls. To search for motive is apt to be an arid study; political history, and its recital of how statesmen have bested their friends, and ruined their enemies, makes dull reading, unless it is inspired. There remains the possibility of judging men by their works. This was the only method in the Prehistoric periods, with which we dealt in Parts I and II of this series, and it is on the whole a very safe one. It seems a little far-fetched to suggest that one may judge character

by brick-bats, and the fashion of the soul from house-furnishings, yet this is the method we wish to adopt.

In dealing with Roman History we shall find the historians divided into two schools, one of which will glorify the Republic, and think the Empire was all Decline and Fall; the other will thrill at the Augustan Age. It is safe to predict, that to whichever school we attach ourselves, or even if we form an opinion of our own, we shall leave off with a feeling of great respect for the Roman sense of Law and Order.

When a nation not only makes Laws, but agrees to keep them, it is a sign of a very advanced state of civilization. With this Roman power of administration, we shall note great developments in the art of Town-Planning, Building, and Civil Engineering. Yet all this wonderful structure came tumbling down, because the fashion of the Roman soul was too material.

The period dealt with in this book is vital to us because the introduction of Christianity into Great Britain dates from the Roman Occupation, and conflicted in a thousand ways with the Roman conception of life and living.

Introduction

The Roman was tolerant. Cæsar writing of the gods of the Gauls, said they were much the same as other peoples, and the Romans, as a proud and conquering race, were not alarmed at the preaching of the disciples of an obscure Jew who had been crucified in Palestine. They persecuted the Christians, not so much for saying that man was made in the image of God, but for political rather than for religious reasons. It is almost impossible for us, with centuries of Christian teaching behind us, to estimate the first effect of the teaching of the Apostles. We know the teaching, even if we neglect it, but to have heard the Sermon on the Mount, as a Roman, for the first time, must have been an extraordinary experience. If he believed the teaching, then his confidence as a Roman was gone, because Christianity was the negation of the Roman way of living, and contributed to its downfall.

Ambrose, Bishop of Milan, made Theodosius the Emperor, in 390 A.D., divest himself of the purple and do public penance for a massacre carried out by his troops. Power had passed to the Church.

In the wider region of Statecraft, we can watch the efforts of man to govern himself. The Hill Camps we saw in Part II could only have been

formed under some system of tribal government, and in the historic period, we find Kings and Empires, Tyrannies, Democracies, and Republics, tried one after the other, in man's search for the proper method of living.

From the time of the Roman Occupation, so far as Europe was concerned, Christianity was destined to become the great force by which men set the "fashion of their souls"; it civilized men again after the dark ages following on the fall of Rome, and inspired the Crusades. Churches were planned to be cruciform, and the figure of Christ was cut in stone, and glowed in the jewelled glass of a thousand windows.

Again, to-day, Western Europe finds itself confronted with crisis. A period of history seems to have closed in 1914, and the future is uncertain. After the cruelty of the War, men are ashamed, and strive feebly, once again, to live their lives in accordance with Christian teaching.

It follows, then, that we are in sympathy with all the people, who, since A.D. was used in the Calendar, have been confronted with similar problems of life and death, of joy and sorrow, and of how life is to be made sweet and wholesome.

The statesman reads History to find how man can be helped to this end, and his trouble is the same as ours, how to make the dry bones live. There are times of enlightenment.

Our readers will sometimes have seen visions, and dreamed dreams. There are days, or better still nights, when the tired body is sloughed off, and the brain rides untrammelled, and we understand the meaning of things. The time curtains roll back a little on one side, and we have a walking part in the scene; we may not speak to the principal actors, but we are close to them; we catch the fragrance of Wolsey's orange as he passes along, and the figures of History become, instead of names, men and women of flesh and blood.

We begin to form certain opinions of our own; one period may seem brave and cheerful, another dark and gloomy. For this reason, perhaps, History has been very much concerned with the doings of great men; even the terrible villains serve the useful purpose of shadow in the picture, and throw into relief the brightness of the heroes. If these have been rather dispensers of Death, than saviours of life, like Pasteur, then it is our own fault for having worshipped at the wrong

shrine. This question of the atmosphere of History is worth testing by our own experience; this may be limited, but we can try to find out why a particular school, or form, or term, or individual, will leave an impression on our minds. The importance of History, or tradition, is that it gives us a standard against which we can measure our own effort, and as History is concerned, just as much with work as war, so work is concerned with the doings of untold myriads of individuals much the same as ourselves.

We should like to acknowledge our indebtedness to Mr. Reginald Smith, F.S.A., Deputy-Keeper of the Department of British and Mediæval Antiquities at the British Museum, who kindly read through our MS. and gave us many valuable suggestions thereon.

Our thanks are also due to Mr. Alfred J. Taylor for information on the Great Bath at Bath, and to Mr. Batsford and Mr. Haggis for their work in publishing.

MARJORIE and C. H. B. QUENNELL.

BERKHAMSTEAD, HERTS.
July, 1924.

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EVERYDAY LIFE IN ROMAN BRITAIN

EVERYDAY LIFE IN ROMAN BRITAIN

CHAPTER I

THE HERITAGE OF ROME

In Part II. of this series, we started with the doings of the men of the New Stone Age, whom we found to be rather like the men of the Old Testament, keepers of flocks and herds, who moved about to find pasture, and made the beginnings of the Hill Camps we find now on the Chalk Downs. They were followed by the workers in Bronze, who learned the art of smelting, and casting; and then came the men of the Early Iron Age, skilled in metal working, and able to forge iron, and to decorate their bronzes with glowing enamels. Great progress was made in every craft, and at the

end of this period, men were regulating their lives by the doctrines of priests called Druids. Notwithstanding all this, in the classical sense, the people remained barbarians. By classical we mean something based on the teaching of Greece. There is a peculiar fitness for purpose, a perfection of balance and proportion about Greek work, when it is compared with that which preceded it, and with much that followed, and this quality makes it a standard by which man measures his effort.

The Romans inherited the Greek tradition, and when we think of their occupation of this country, we must regard it as something more than the arrival of a certain number of individuals in new-fashioned clothes, who built houses, and made everyday things, to altered patterns. In this book we leave the Hill-top Towns, and Lake Villages, and pass on to Silchester; from the Tribal Hut to the Basilica; from Druids to Pagan Temples, and then to Christian Churches.

The inhabitants of Gaul and Britain had long traded with the East; we saw this in Part II., page 105, but now they were to be conquered by a people who had learned to build ships from their fights with the Carthaginians. The Carthaginians fol-

FIG. 2.—Girls playing Knuckle-bones.

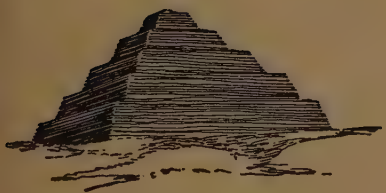

FIG. 4.—The Step Pyramid at Sakkârah.

FIG. 5.—An Important Person of Early Sumerian Times.

lowed the designs laid down by the naval architects of Tyre and Sidon, who in their turn may have been influenced by the boat-building of Thothmes III., in his Syrian expedition of 1478 B.C.

In Parts I. and II., we tried to show how the very simple things, axes for instance, have their first beginnings deeply buried in the past. If this be so, what an infinity of thought and idea, what ages of development, are behind the ancient civilizations of the East, which came to flower in Greece! When Britain became a part of the Roman Empire, she established a direct connection with these ancient civilizations.

We will attempt to sum up these influences, not with any idea of being able to do so adequately, but to suggest to boys and girls that here is a field for discovery by themselves.

If we go right back to the Archaic period or first three Dynasties in Egypt, commencing about 4400 B.C., we find that the Egyptians were already able to carve in the round, and to make beautiful little things of gold. Tools were made of copper, though stone was still also used. The potter's wheel started in the IIIrd Dynasty, and pottery was glazed. *Drawing was good, and used for writing.*

The Step Pyramid, Fig. 4, was built in the Archaic period.

The Old and Middle Kingdoms started with the IVth Dynasty, also the age of pyramid builders. Each pyramid had its temple and court before it, and courtiers and slaves were slain to accompany their lord. Later, their place was taken by models, and little figures called "Answerers," whose job was to answer "Here am I, whensoever thou callest me," and to assist their master were he given a task in the underworld. The humbler folk were buried around their lords in mastabas, so called from an Arab word for bench which they resembled.

By the end of the VIth Dynasty the nobles had risen to so much power as feudal chiefs, that they quarrelled among themselves, and it was not until the XIth and XIIth Dynasties that the Theban kings restored order. Great works were put in hand, land was reclaimed, and dams built. Expeditions were sent to Syene; granite, diorite, and green felspar came from the Western Desert malachite and turquoise from Sinai; wood from Syria; gold from Nubia; frankincense and myrrh for embalming from Punt; *and architecture and sculpture reached their zenith.*

FIG. 3.—Map showing British and Roman Road Systems.

During the XIIIth Dynasty the kingdom appears to have been divided against itself and, with the invasion of the Hyksos, or Shepherd Kings, who were Semitic invaders from the East, the Middle Kingdom came to an end, and Egypt was brought into direct contact with Asia.

To find how it was that the Hyksos invaded Egypt, we must go to the home of another river civilization, that of Babylonia and Assyria. This was built up on the foundations laid by Sumerians, who were non-Semitic, and lived in Sumer, in S. Babylonia, on the shores of a Persian Gulf, about 180 miles higher up than the present one. By 3500 B.C. they were civilized, used metal, lived in cities under a settled government, and had invented cuneiform script. Skilled in war, *the soldiers wore body armour, carried huge bucklers, and fought with battle-axes;* they did not use the bow or the horse.

Power was then transferred to N. Babylonia, and the Akkadian civilization, which was semitized Sumerian in character, spread its influence into Syria, and to Susa in the land of the Elamites to the East. In this period came Sargon of Agadé, the great Babylonian hero of 2750–2700 B.C. *These people used the bow and probably owed their victories*

to the use of the new arm. It is important to remember, that the bow probably made quite as much impression as the Tank, when it was first used. About 2500 B.C. the Semitic influence waned, and we come to the Later Sumerian; then, after many ups and downs, Sumer and Akkad were joined to form the 1st Dynasty of Babylon. This was accomplished by Semites from the W., about 2050 B.C., and the kings of Ashur (later called Assyria.)

About 1746 B.C. we come to the Kassite invasion of an Indo-European people from the N.E., who founded a dynasty lasting about 600 years. Sumerian kings eked out an existence in S. Babylonia for some 300 years, before being finally absorbed into the Kassite kingdom. The Kassites were Aryan speaking, *and may have introduced the horse*, and gained from its use, as the Akkadians had from the bow. This incursion from the N.E. forced the Semites to the S.W., and is the explanation of the Hyksos, or Shepherd Kings, in Egypt from the XIIIth to the XVIIIth Dynasties.

We will now return to Egypt, and trace the beginnings of the Empire. It was Queen Hatshepset, the widow of Thothmes II., who sent the expedition to Punt (Somaliland), and illustrated this by

FIG. 6.—A Ship of the Expedition to Punt.

reliefs on the walls of the Temple of Der-el-Bahri. From these we know what the ships they used were like, and Fig. 6 shows one, with the reed canoe in front from which it was developed. This ship is very important, because Thothmes III., the greatest of all the kings of Egypt, came after Hatshepset, and he carried the arms of Egypt into Palestine and Syria; *he sailed with his army to Phœnicia, and this must have been one of the first applications of sea power.* Thothmes III. was very successful, and won the battle of Megiddo, 1478 B.C. It is interesting to note that Minoans from Crete came to the court of Thothmes III.

The Phœnicians maintained themselves, by their trading qualities, from the time of Thotmes III. to Alexander. They sailed all over the Mediterranean; founded Gades (Cadiz) as early as 1100 B.C., and Carthage itself at the end of the ninth century B.C. They must have played a great part in naval development.

The Egyptian Empire culminated in Amenhetep III.; and his successor Amenhetep IV., or Akenaten, was the heretical emperor who believed in the Lord of the Disk, manifested in the Sun, the source of all life, instead of Amen-rá. But the Empire

was declining, and came to an end with Tut-ankh-Amen, whose tomb was discovered by Lord Carnarvon and Mr. Carter.

The aggressors were Hittites, hardy mountaineers from the uplands of Asia Minor and not of Semitic stock. Rameses I., the founder of the XIXth Dynasty, and his successors were engaged in a struggle with them, which finally exhausted both Hittites and Egyptians, and left them open to attack from other peoples.

During the XXth dynasty, the Libyans and Mediterranean tribes attacked Egypt, about 1196 B.C., because they had been driven from the Ægean by the Achæans and Phrygians. *This date is worthy of special notice, as a reminder that at the time of the Trojan War, the history of the Near East was already very ancient.* These tribes, settling down, became the Philistine nation.

It is now that we began to hear of the Israelites, who absorbed the Canaanites and Amorites, and entered into their struggle with the Philistines to whom they had to submit about 1080 B.C. Saul revolted against the Philistines, about 1030 B.C., and was followed by David, who freed the land. Solomon succeeded about 970 B.C.; his building of

FIG. 7.—The Siege of a Walled City in Assyria.

the Temple was the first great architectural essay of Israel, then a power allied to Egypt, and Hiram of Tyre. With the latter Solomon sent a naval expedition to Ophir, which may have been the Punt of the Egyptians, S. Arabia, or even India. The luxury and wealth of Solomon weakened the kingdom built up by Saul and David, and at his death it was divided into Judah and Israel. Egypt in the XXIInd Dynasty sacked Jerusalem about 925 B.C., and carried off the golden shields of the Temple. The end came when Shalmaneser II. defeated Ahab of Israel, and the kings of Damascus and the Hittites, at Karka, 854 B.C.; after this Palestine merges into Assyria, and the land was laid waste in 722 B.C., and Israel carried into captivity.

The Hittites were exhausted in their struggles with Egypt, and so laid themselves open to the attacks of the Assyrians, who invaded the Anatolian Highlands about 1107 B.C., under Tiglath Pileser I. Assyria's great man came in Ashur-nasir-pal, 884–860 B.C. *He organized the army and perfected the use of the bow and military engineering siegecraft.* There is in the British Museum a sculpture of this period, showing a walled city being taken by means

of a battering-ram, and siege tower, of quite mediæval appearance. We have attempted to show this in Fig. 7. *Rome inherited her tradition of military engineering from the Assyrians.*

The Assyrians were fiendishly cruel, and the British Museum sculptures can be studied to see how they treated their captives. Other kings formed libraries of clay tablets, which being discovered to-day, are translated, and tell us of Assyrian history. We hear of the Greeks making a hostile descent on Cilicia in 698 B.C.; but Assyria was still strong, and under Ashur-bani-pal, 669–626 B.C., reached the height of its power, conquered Egypt, and dominated the Near East.

In 651 B.C. Egypt threw off the yoke and the Scythians overran Syria. In 612 B.C. Nineveh was destroyed, and the prophet Nahum summed up the general execration, when he said: "Nineveh is laid waste; who will bemoan her?" The Assyrian Empire had come to an end by reason of military exhaustion.

Our tale now shifts to the island of Crete, where the wonderful Minoan civilization has been laid bare by the excavations of Sir Arthur Evans. This civilization can be explained, in part, by the

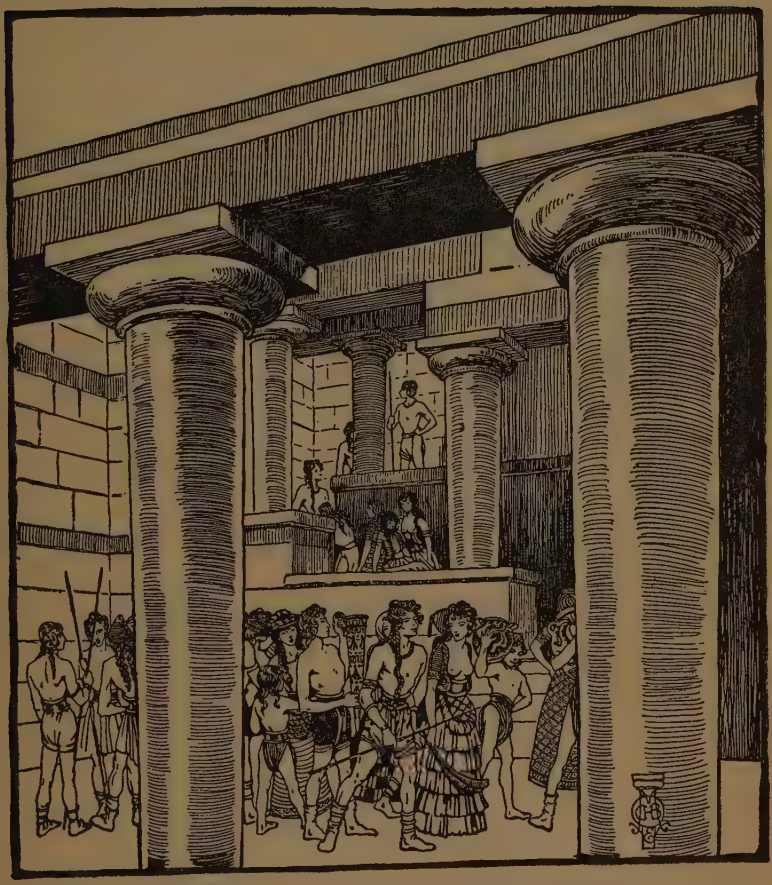

FIG. 9.—The Great Stairway at Knossos.

geographical position of the island. The Minoan Sea Lords were so placed, that they were at the hub of all the movements and influences of the very ancient Near East; they could benefit by observing the work of their neighbours, and conduct their own experiments on their island home in safety. They sailed to the Nile, and traded with the Egyptians, by whom they were called Keftiu; they carried oil and wine, and wheel-made pottery and sponges.

Sir Arthur Evans has divided their civilization into Early Minoan, from about 3400 to 2200 B.C.; Middle Minoan, to 1600 B.C.; and Late Minoan, to 1200 B.C. Each is sub-divided again into three periods, and all are in the time before Iron, when Bronze was used. The Early Minoan was preceded by a Neolithic civilization, which has left strata many feet thick.

These Minoans were of the same Mediterrean stock, of which we wrote on page 23, Part II.; this is an important detail. They buried their dead in a cist, or grave, and did not cremate the bodies. The men wore long hair and a waist-cloth, over which came a short kilt, and with nothing on the upper part of their bodies. The women's dress was

extraordinarily modern in appearance. They practised tight-lacing, and wore bodices of "zouave" shape, with flounced skirts and tiny aprons like a Victorian lady.

The Minoan buildings were splendid, and show a fine sense of planning, and the ability to group a complicated series of courts, corridors, chambers, and stairways, into a whole. Fig. 9 shows the Great Stairway at Knossos.

The Minoans were fine craftsmen: their metal work was particularly good, and their pottery marked a great advance. In decorating this they developed curved lines into the spiral in third Early Minoan times. This spiral travelled in a roundabout way, from the Ægean to England, and formed the basis of the late Celtic art we saw in Part II.

They appear to have been a joyous people, and one of their sports was bull-baiting, or leaping, in which the athletic Minoan maidens joined. This brings up the question of a bull religion at Knossos, and the legend of the Minotaur kept in the Labyrinth. Was it only a legend? or did Theseus kill a monster fed on the tribute of youths and maidens?

FIG. 10.—A Greek Trireme.

We know very little of their religion, but in all probability it was a form of worship of a great Mother God, who personified Nature, and the later Dryads, Satyrs, Fauns, Naiads, and Nereids were perhaps survivals from this earlier Ægean hierarchy.

We shall know more of the Minoans when we can discover the key to their writing; they wrote on clay tablets with a stilus, and an early hieroglyphic system developed into a regular system of writing.

In the end catastrophe fell upon Crete, and Minoan civilization was shifted to Mycenæ, on the mainland of Greece. Here we find the wonderful beehive tombs, which were constructed on the same principle as the chambered barrows of the Neolithic period we saw in Part II., page 77, and bodies were buried, and not cremated. The lintel was still the principal feature of building, and the architecture remained Mediterranean in character, though it was the work of men who had come from the Danube.

Then again, catastrophe fell, the Mycenæan survival of the Minoan civilization was overwhelmed by the immigration from Thessaly of a round-headed people of Alpine stock, who spoke

an Aryan tongue. These Achæans may have lived in Thessaly, while the Minoan civilization was in full bloom in Crete, but about 1400 B.C. they were forced by some great desire to move S., with disastrous results for the Mycenæans, and, as we have seen on page 27, their coming also caused great commotion in Asia Minor.

The Achæans used iron, and so we pass to the Trojan War, and the Heroic Age of Homer. It is probable that in the *Iliad*, the Achæans have appropriated some of the glories of Mycenæ. The Dorian invasion of about 1100 was another influx of Aryan-speaking people; but it was this fusion of Achæans and Mediterranean stock which resulted in the marvellous civilization of historic Greece.

We can now return to Babylonia. After Nineveh fell, Babylon revived; Nebuchadnezzar attacked Egypt, captured Jerusalem, and carried the Jews into captivity in 596 B.C.

Then comes the period of the Medes and Persians, who were an Aryan-speaking people from Iran. Cyrus attacked Crœsus of Lydia, and the Ionian Greeks, and brought against them the knowledge of siegecraft learned from the Assyrians. Babylon was overthrown, and Tyre and Sidon came under

	EMPERORS.	EVENTS.	LITERATURE.	ARCHITECTURE.
B.C.				
55	Cæsar.	1st Expedition to Britain.	Lucretius, 97–53 B.C.	
54	"	2nd " "	Virgil, 70–19.	Forum of Julius Cæsar, Rome.
49	" (Consul).	Crosses the Rubicon.	Horace, 65–8	Basilica Julia, Rome.
46	"	Calendar reformed.		
44	"	Assassinated.		
43	Octavian.	Becomes Consul.	Ovid, b. 43; d. 17 A.D.	
		"Triumvirate" formed.		
37		Herod, King of Jews.		
30		Death of Antonius and Cleopatra.	Horace's 2nd Book of *Satires*.	
29			Virgil's *Georgics*.	
				28 Temple of Apollo (Palatine).
27	Octavian becomes Augustus.		1st 3 books Horace's *Odes*.	
24			1st Book Horace's *Epistles*.	
20				
19			Death of Virgil.	Temple of Roma (Pergamum).
13			4th Book Horace's *Odes*.	Theatre of Marcellus, Rome.
11				Ara pacis Augustae.
9			Livy's *History* ends.	Arch at Susa.
8			Death of Horace.	
4		Death of Herod.	Birth of Seneca.	Forum of Augustus, Rome.
A.D.				
4		Birth of Christ.		
14	Death of Augustus. Tiberius.	Census of Roman citizens, about 5,000,000.		
17			Death of Ovid.	
19		Death of Germanius.		
23		Pontius Pilate in Judæa.		
37	Death of Tiberius. Gaius Cæsar (Caligula).	Birth of Nero.		
41	Death of Caligula Claudius.		Exile of Seneca.	
43		Exiled to Britain, under Aulus Plantius. { Caractacus defeated. Camalodunum captured. Claudius visits Britain.		
44				
47		Victories of Vespasian and Titus in Britain.		
50		{ Victory of Ostorius Scapuia over Iceni. Foundation of Roman Camalodunum.		
54	Death of Claudius. Nero.			
59		Suetonius Paullinus legate.		
61		Capture of Mona—rising of Iceni under Boadicea, and her death. Camalodunum burnt. London and S. Albans captured by Britons.		
64		Burning of Rome. Execution of Christians.		
68	Death of Nero. Vespasian.	End of Julian House.		
70		Titus takes Jerusalem, 70.		71 Forum of Vespasian, Rome.
78		{ Agricola in Britain. Destruction of Druids in Anglesey.	Tacitus marries Agricola's daughter.	
79	Death of Vespasian. Titus.	Destruction of Pompeii.	Death of Pliny the Elder.	80 Inauguration of Colosseum.
81	Death of Titus. Domitian.			Arch of Titus, Rome.
84		Agricola reaches Scotland.	*Dialogues* of Tacitus.	
85		Agricola's fleet sails round Britain.		
90	Death of Domitian. Nerva.	Recall of Agricola.		
98	Death of Nerva. Trajan.	War with the Dacians.	*Agricola* (Tacitus).	Forum of Nerva, Rome.
107		Triumph of Trajan.		
113			Death of Pliny the Younger.	
115				{ Completion of Forum and Colum of Trajan and Basilica Ulpia. Arch at Beneventum.
116			{ *Annals* of Tacitus. 1st Book of Juvenal.	
117	Death of Trajan. Hadrian.			Pantheon, Rome.
122		{ Hadrian in Britain. Construction of Wall.		
138	Death of Hadrian. Antoninus Pius.			
143		Lollius Urbicus constructs works between Clyde and Forth.		
150				
161	Death of Antoninus. M. Aurelius & L. Verus.	Justin's first defence of Christians.		
169	Death of L. Verus.		abt. 174. *Meditations* of M. Aurelius.	176 Col. of M. Aurelius, Rome.
180	Death of M. Aurelius. Commodus.			203 Arch of Septimus Severus, Rome.
193	Death of Commodus. Septimus Severus.			
		Albinus legate declared emperor by his troops. 196; but defeated, 197. Britain divided into two provinces.		
208		Severus in Britain and dies at York.		
211	Death of Severus. Caracalla.			215 Thermæ of Caracalla.
217	Death of Caracalla. Macrinus & Elagabalus.			
222	Death of Elagabalus. Severus Alexander. Killed by soldiers in 235, who select C. Julius Verus Maximinus. Killed 238.			
238	M. Antonius Cordianus declared Emperor. Killed, and succeeded by M. Clodius Pupienus Maximus and D. Cælius Balbinus, who	Goths cross the Danube.		

	Philippus. Killed 248. Decius. d. 251.			
251	Trebonianus Gallus. Killed 253. M. Æmilius Æmilianus. Killed 253. P. Licinius Valerianus.	Persecution of Christians. Advance of Goths		
253	Gallienus.			
257	Postumus, Emperor in Gaul.	Valerian's Edict against Christians.		
260		Valerian captured by Persians.		
268	Postumus and Gallienus perish. M. Aurelius Claudius. d. 270. His brother succeeds, and is killed.	Era of Confusion. Ravages by Goths.		
270	Aurelian. Killed 275. Is succeeded by Tacitus, killed 276. Florianus, Emperor at Rome. Killed 276.			Builds the Aurelian Wall round Rome.
274		Birth of Constantine.		
276	M. Aurelius Probus in the East. Killed 282. Succeeded by Carus, killed 283.			
284	Diocletian & Maximian } abdicate 305. Civil War.	285 Maximian becomes Cæsar, and then Augustus. Carausius, Emperor in Britain.		284 Senate House, Rome, rebuilt.
303		Persecution of Christians.		
304		Martyrdom of S. Alban.		
305				Baths of Diocletian, Rome.
306				Basilica of Constantine, Rome, begun.
310		Constantine visits Britain.		
313		" grants religious freedom.		
314		Council of Arles.		
315				Arch of Constantine, at Rome.
325	Constantine. d. 337. Struggles between his successors. Constantine, 353–360.	" Nicæa.		
330				Byzantium (Constantinople) becomes new Capital.
360	Julian overthrows Christianity. d. 363. Jovian restores Christianity. Killed 364.			
364	Valentinian & Valens } d. 375. Become Augusti. d. 378.			
375	Valentinian II. & Gratian.			
379	Theodosius. d. 395.			
394	Honorius in the W. Arcadius, Emperor in the E., 395. d. 408. Younger Theodosius in the E., 408.	Maximus secures Britain. London destroyed. Capture and sack of Rome, 410.		

Saxon raids in Britain.

Coast fortified against Saxons.

Picts and Scots invade Britain.

the Persians. Cambyses conquered Egypt, and became Pharaoh. Darius (522–485 B.C.) extended the Persian Empire until it included the Indian Punjab on the E. and in the W. came into conflict with the Greeks, who, since the eighth century, had been colonizing the Mediterranean, and taking the place of the Phœnicians as traders.

The Greek victory of Marathon (490) did not disturb the Persians, who at this time looked on their opponents only as troublesome sea pirates, but it gave the Greeks confidence, *and enabled Themistokles to urge on them the importance of building a navy.*

The Persian system of government was very much fairer and better than that of the Assyrians, and the conquered were given a measure of self-government under the central Persian authority. The Jews returned to Jerusalem.

Xerxes took over the work of Darius, but fortunately for Western civilization, did not possess his genius. A revolt in Egypt and Babylon had to be quelled, and delayed the Persians from wiping out the minor check they had received at Marathon, and so gave Themistokles the time he needed. Carthage invaded the Greek colonies in Sicily in

481 B.C., and was defeated, and in 480 Xerxes began his march to the Hellespont. Marching through Thessaly, while his navy coasted the shore, the armies met at Thermopylæ where the Spartans covered themselves with glory, and stayed the enemy a little, until cities falling fast, the Athenians took to the sea, *and the victory of the Greek Navy at Salamis saved Western civilization.*

Fig. 10 has been drawn to show our idea of what the Greek Trireme looked like, and with great regret we shall not seek to justify it. If our readers are interested in the "Trireme question," we will at once cut short the matter by referring them to the Authorities we have mentioned at the beginning of this book, and it will then be found that they do not agree among themselves; the scholars, archæologists, and the practical sailors have different points of view. We have been at considerable pains, in our List of Authorities, to enable our readers to plunge into the fray, and the "TRIREME question" is one to start quite young; that is, if any conclusion is to be reached in the ordinary span of human life.

Generally it can be said that the Trireme was a long snaky-looking craft, 140 to 150 feet long, by

FIG. 8.—An Assyrian Galley.

FIG. 11.—How the Trireme was rowed.

about 16 feet beam, drawing 4 to 5 feet of water, and girded by a double cable.

Fig. 11, again, is our version of how the Trireme was rowed, and is based on the article by A. B. Cook and Wigham Richardson in the *Classical Review*. We cannot see how the craft could have been propelled in any other way, but many other people can (see the Authorities). A double-banked launch to-day means a large ship's boat, with two men to each oar, so with the Trireme, it may have had three men to each oar, or three oars as we have shown. To us it is inconceivable that it meant three rows of rowers, superimposed one above the other, and it would be amusing to try setting out to scale a section showing how they would have sat, and what would have happened when the boat rolled.

The Peloponnesian War exhausted Greece proper, and allowed Macedonia to come to the front, and Alexander (334–323) conquered the Persian Empire. The Greeks progressed from Kings to Tyrants, and then to Democratic City States. The Macedonian Empire spelled decay, and Greece was really stronger when saved at Salamis by freemen acting together. This was the

first time the world had seen such a thing, and it was incomparably different, and better than even the enlightenment of the Persians.

The Parthenon was built after the defeat of the Persians, and typifies Greek civilization at its apex. There is about this building an ordered beauty, springing from perfect balance between its parts, which shows that a new sense of proportion had come into the world; mere size and bulk were no longer relied upon. Greek architects were not so adventurous as the Romans were later, and we do not know very much about their domestic work; the greater part of their skill and enthusiasm was centred on perfecting the form of their Temple and this they did in a wonderful way. *They used what we now call three Orders of Architecture*—the Doric (Fig. 12), the Ionic (Fig. 13), and the Corinthian (Fig. 14). These consisted of columns, with capitals and bases, and the lintel bridging across these, made up of architrave, frieze, and cornice. The cornice, at the ends of the Temples, was broken up into flat gables, or pediments, and the artistry consisted of refinements of detail and spacing. We shall see later how these orders became the basis of Roman architecture.

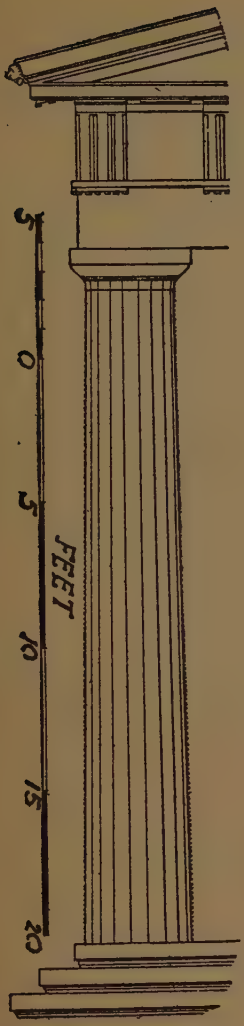

FIG. 12.
Greek Doric Order.
(Temple of Zeus, Nemœa).

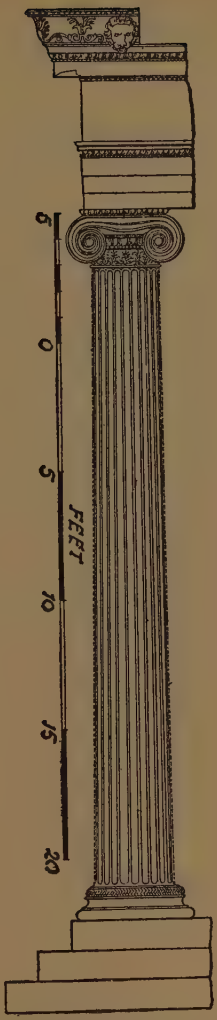

FIG. 13.
Greek Ionic Order
(N. Portico of Erechtheum, Athens).

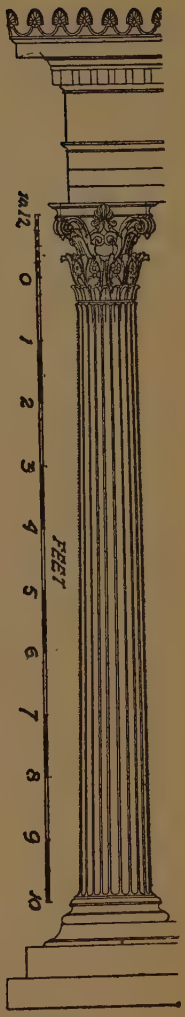

FIG. 14.
Greek Corinthian Order
(Choragic Monument of Lysicrates).

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Greek architecture was allied to a literature, which expressed new and invigorating thought, with a freedom which would have been impossible to the Assyrian.

This was the heritage of Rome, and when the Romans came to Britain we were brought more closely into touch with the ancient civilizations of the Near East than ever before, or since. If we go to Silchester to-day, it is interesting to think that the lesson of how to build its walls, and fortify them was learned perhaps from Assyria.

We will leave the history of Roman Britain till p. 179, and go to Silchester now to see what fashion of towns the Romans taught the Britons to build. Silchester dates from the time of Agricola's governorship (see Chart).

CHAPTER II

SILCHESTER

Calleva Atrebatum, Calleva (the town in the wood) of the Atrebates, shown in Fig. 15, was planned on regular symmetrical lines. Silchester, as we call it now, was Town-planned, and here for the first time we meet the chequer-board type of planning in England. It presents a marked difference to the plan of Glastonbury Lake Village, which we saw in Part II., Fig. 65; there we had a haphazard arrangement, with less sense of order.

If we try to trace the evolution of the chess-board type of plan, we are led back from Rome to Greece, and the work of Alexander the Great. He was a great Town-planner, and his influence can be traced in the design of the cities of Asia Minor. The straight streets commended themselves to the soldier, because he could more easily maintain

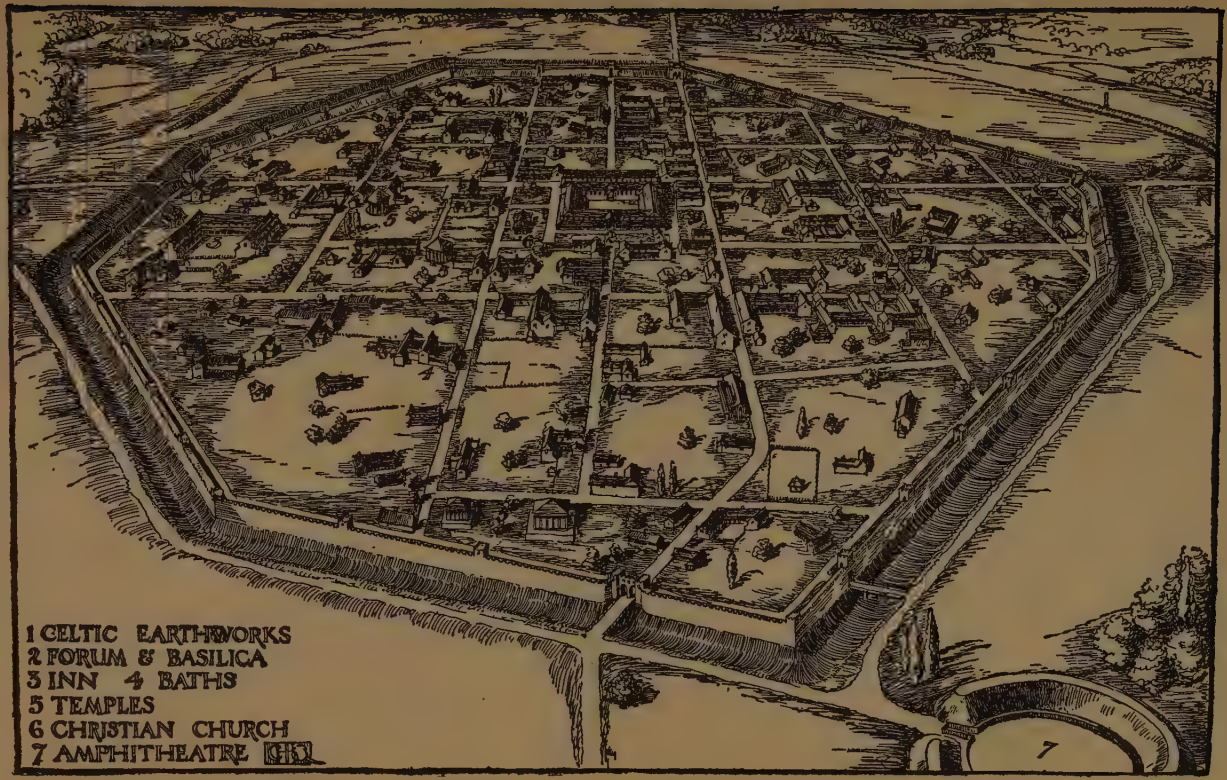
control than in crooked alleys. In Roman times the soldier was much more than a mere fighter; he was, in fact, the handy man of the day, and could plan a town, build walls, and carry out engineering works. When Roman soldiers retired it was a practice to gather them together, and grant them land, as a reward for their services; then they built a Town, and became a bulwark to the State; Timgad in the province of Numidia, in Roman Africa, was such a city. In more ways than one the power of Rome depended on its legionaries, and we like to think of them, when their fighting days were over, building and carpentering, and showing the natives that their strong arms were attached to cunning hands.

The chequer plan reached Italy in one other way, which is interesting. In Part II., page 168, we describe the Swiss Lake Dwellings, how, as the lakes became over-populated, the people moved downhill, and built for themselves strange dwellings called Terremare. Fig. 16, of Castellazzo di Fontanellato, W. of Parma, illustrates one of these. It is of the Bronze Age; an area of about 30 acres is surrounded by a high bank, around which has been diverted a river to form a ditch. The streets

inside are planned with regularity, and an inner citadel is surrounded with water. Here, between 1400 and 800 B.C., is the chequer plan, made by a people who originally found their way down from the Danube plains, as did the Achæans of Ancient Greece, and had the same ideas of Town-planning.

It is quite evident that the Romans, wherever they went for their inspirations, were accomplished surveyors. No matter how well a road is made and finished, it has to be begun by some one, who determines its direction, and settles the gradients; a town cannot be laid out, until men come along and peg out the lines of its streets, and walls. This brings up the question of mensuration. The surveyor must instruct the constructor; he must say, for example, "Here is the main street of your town, it is so many somethings wide."

In these days of plenty, we are accustomed to travel about with bulging pockets, full of rules, rods, and tape measures, but this was not the case in the days long before Rome, so men used something which they could always be sure of having with them, to wit, their feet, and by Roman times, this habit had passed from Custom into Law. Vitruvius, writing in the time of Augustus, said:



Glastonbury, Pt. II. p. 173.

FIG. 15.—Silchester (Calleva Atrebatum).

"It is worthy of remark, that the measures necessarily used in all buildings and other works, are derived from the members of the human body, as the digit, the palm, the foot, the cubit." The normal Roman foot was 296 mm., or a full $11\frac{5}{8}$ English inches. There were 16 digits, and 4 palms in the Roman foot, and the cubit was 6 palms, or $1\frac{1}{2}$ feet.

Five Roman feet went to the *passus* (pace), and 1000 of the latter to the mile.

In the same way the numerals have been derived from the hand with its five fingers. The Roman V is thought to have been simplified from a drawing of the hand meaning 5. IV would mean the hand less one finger, or 4; and VI the hand plus one or 6, and X a double hand or 10.

When it came to measuring land, the Roman thought of the feet of his oxen rather than his own, so the unit he used was the iugerum, or yokeland; the oxen ploughed a furrow 120 Roman feet long, before they wanted a rest, and 120 by 120 formed the actus, and two square actus, or 120 by 240 was the day's ploughing, and this became the iugerum, which was the unit of the Roman land surveyor. The Roman dealt in land in blocks,

which he could size up in his mind, and by which he was able readily to estimate the crops which could be grown. Mensuration, as most other subjects, is full of interest, if you go to work to discover it. In England, our furlong is a furrow long, equal to $\frac{1}{8}$ of a mile, or 40 rods, poles, or perches; this rod unit of $16\frac{1}{2}$ feet has played a great part in English mensuration, and we shall say something of it later on.

Below we have set out in tabular form Roman measures:

Feet.	Gradus.	Passus.	Decempeda.	Actus.	Iugerum.	Stadium.	Mile.
$2\frac{1}{2}$	= 1						
5	= 2	= 1					
10	= 4	= 2	= 1				
120	= 48	= 24	= 12	= 1			
240	= 96	= 48	= 24	= 2	= 1		
625	= 250	= 125				= 1	
5000	= 2000	= 1000	= 500				= 1

and the Roman mile was just over 1618 English yards.

In founding a Roman city, the plough was used to trace the outline of its walls, and it was inaugurated by the Augur, who consecrated the Templum, or centre square; here the kardo, running from N. to S. was crossed by the decumanus from E. to W. The four quarters of the town, around these main

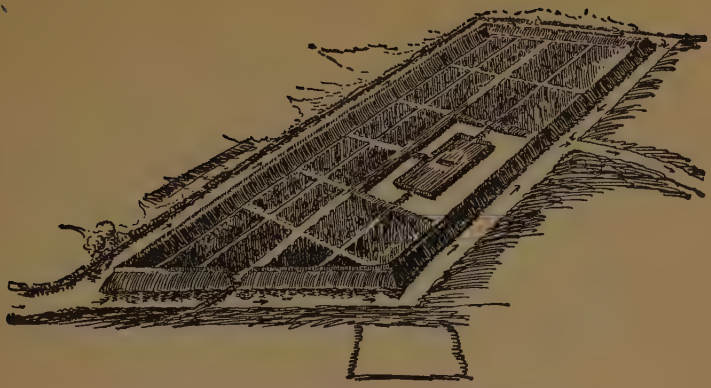


FIG. 16.—Town-Planning in the Bronze Age.

FIG. 17.—Roman Surveyors (Agrimensores or Gromatici) using the Groma.

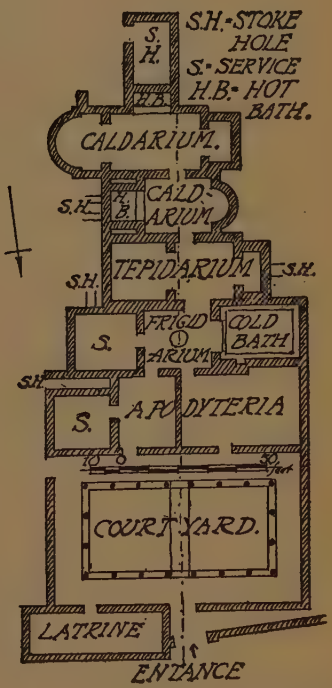


FIG. 19.—Plan of Baths at Silchester.

streets, were divided up into rectangular blocks, of which the iugerum was the general unit.

The surveyor, who was responsible for the lay-out of the city, used an instrument as Fig. 17, called the Groma; this consisted of a staff, with a cross turning on its top, from the ends of which small plummets were suspended by cords. These plummets came at the corners of a square, and it was the cords by which they were suspended, that were used to sight the lines the surveyor wished to set out. His method was to send his assistants to hold rods which were stuck in the ground, where they were sighted as being on the line. It is obvious that the square line the Romans liked so much, could be set out very readily. Once the lines were set out, a 10-foot rod was used, and 12 of these gave the actus of 120 feet. Surveyors to-day use an instrument founded on the Groma, which they call a Cross Head Staff.

Silchester (Fig. 15) was not a Roman municipality. There were only five of these in England: Camulodunum (Colchester), Verulamium (S. Alban's), Lindum (Lincoln), Glevum (Gloucester), and Eburacum (York). These were probably responsible for the government of the country

immediately around them. There were Imperial domains, as the lead mines of the Mendips, and the remainder appears to have been organized on a Cantonal system, corresponding to the British tribes, with the chiefs as magistrates. Silchester must have been the headquarters of the Atrebates. The town was rebuilt in its Roman form, between 70–80 A.D., and, situated as it is (Fig. 3), on the top of a rounded hill, in pleasant country, and at the intersection of busy roads, must have been a place of importance.

When we consider its plan, we shall find that its chessboard regularity is tempered with a certain calculated irregularity, and in some ways it is as wayward as a modern garden suburb. It looks as if its Atrebatan designers, after accepting the regularity of the streets, distributed the houses, on the principle of currants in a bun—just anyhow. They did not want their town to be wholly Roman, but Romano-British, and this is what they achieved.

We will leave our bird's-eye view, and, by a stretch of imagination, come down to earth, and believe that we are living in Roman times, and that we are paying a visit to Calleva Atrebatum. We

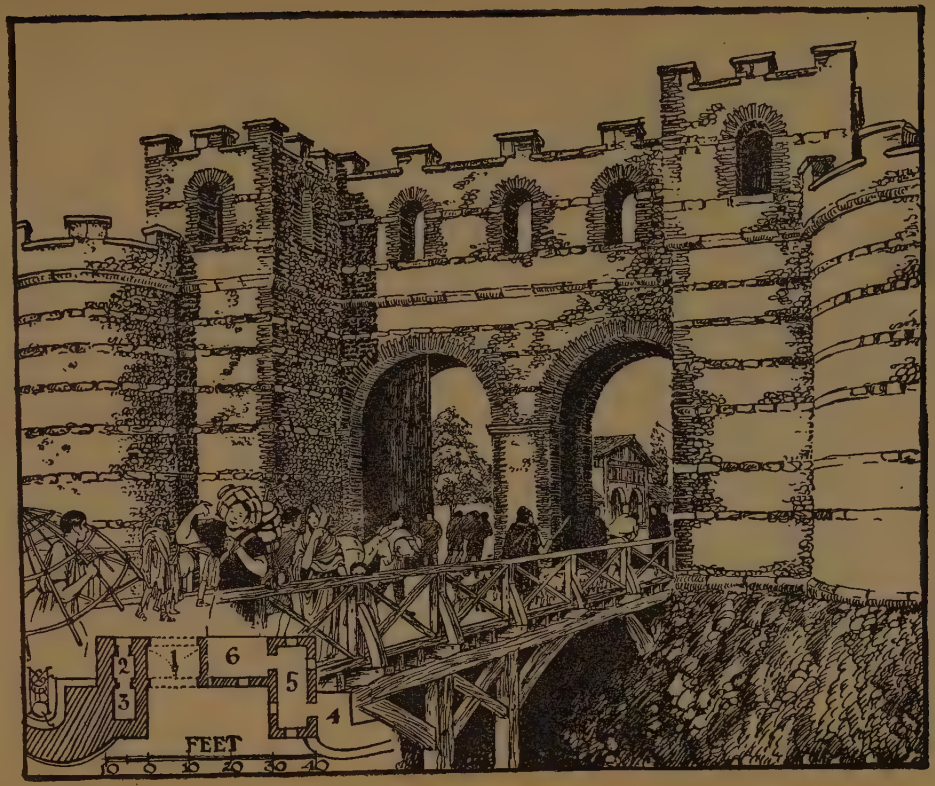


FIG. 18.—The West Gates of Silchester.

approach the town by the road from the N., and on the outskirts we pass a funeral party going to bury its dead, as was the Roman custom, without the walls at the side of the road. Close up to the town, at 1, Fig. 15, is a ditch and bank, the remains of the old British earthworks, which had surrounded the tribal stronghold long before the days of the Romans. It may well be that the place was inhabited, when Badbury Rings (Figs. 28 and 29, Part II.), and Maiden Castle, near Dorchester, were busy centres. Like many British earthworks, these banks and ditches follow the contour lines of the hill, and are not square. These British earthworks, influenced the lay-out of the stone walls which were added at some later date than the rebuilding in Roman times; thus the streets are Roman in their chequer pattern, and the walls are British in their plan.

As we pass along outside the walls, we notice that they are about 20 feet high, built of concrete rubble, and faced with flints; they are strengthened with bonding courses of ironstone, and finished at the bottom with chamfered stone bases. There are rampart walks on the tops of the walls, with embrasures through which the watchmen could see the

approach of strangers; at the base of the wall is a ditch 12 feet deep and 80 feet wide.

When we are inside the walls, we shall find that these are 9 feet 6 inches broad at base, lessened by set-offs inside to about 7 feet 6 inches at the top, and at about 200 feet intervals the full thickness of the wall is carried up like a wide buttress, and on these are placed watch towers. To further strengthen the walls, a mound of earth has been placed against them inside.

By this time we have arrived at the West Gate, and Fig. 18 shows its appearance. The town, or curtain, walls are curved inwards on to two towers, and so take the form of bastions, from which the bridge over the ditch can be raked. Between the towers are double archways of 12 feet span, at 1 on plan; at 2 is a guard-room, with a lock-up behind it at 3. The other side of the plan is at the rampart level, and shows how the guard can pass from the top of the walls at 4, through the towers at 5, and over the archways at 6.

If we now pass through the gate, it may be as well to consult Fig. 15, and imagine that it is the plan of Calleva Atrebatum, scratched in a tablet which has been lent to us by the keeper of the gate.

FIG. 20.
Strigil.

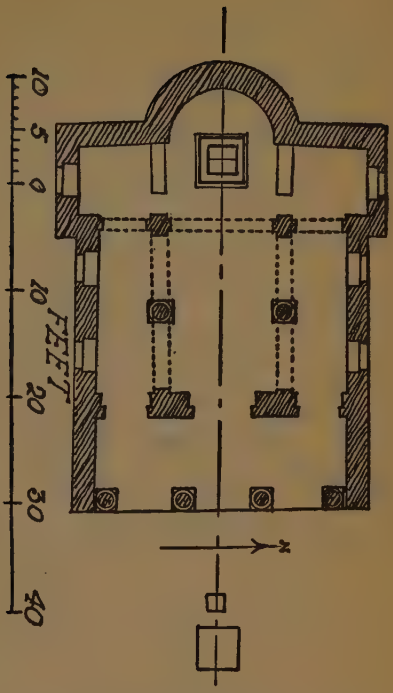


FIG. 23.—Plan of Christian Church at Silchester.

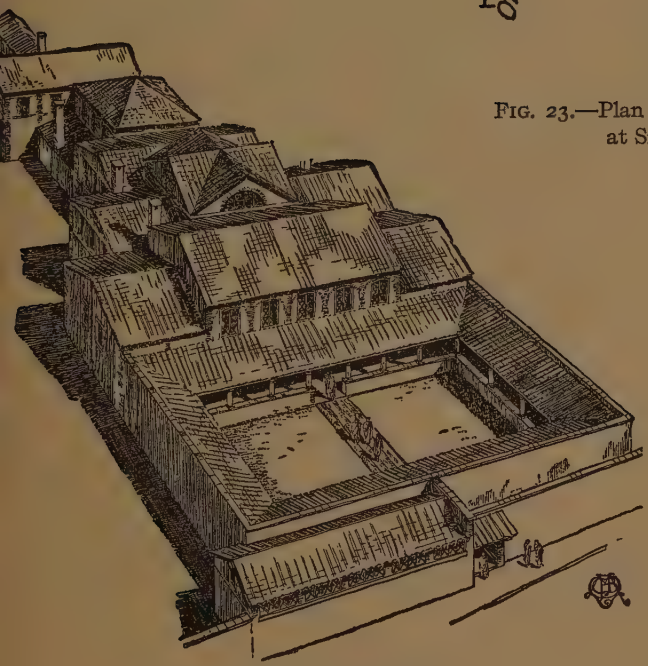


FIG. 21.—Baths at Silchester.

FIG. 26.
Sacred Monogram, Chi-Rho.

We will follow the road which goes due east, until it crosses another running from the North to the South Gate, and here we will turn to the right. Almost immediately, at 2 on the plan, we shall come to a building, which by its size shows itself to be a place of importance, and on inquiry we find that it is the Basilica; however, we will defer our inspection of the city, until we have got rid of our luggage, and found an inn at which we can stay, and by consulting our map we see that there is one a little way ahead at 3.

The Inn turns out to be a place rather like the house we are describing on page 92, except that it has more accommodation, and has baths attached. We hear that there are larger baths, at 4 on plan; so after leaving our bags at the inn, we go on to these, so that we may refresh ourselves after our journey.

Fig. 19 shows the plan of the building we found there. We enter a courtyard with a colonnaded walk around it, and this leads into the Apodyteria, or dressing-rooms; here we take off our clothes and give our valuables into the care of an attendant. We then go into the Frigidarium, or cold room; here we see men who have finished their baths,

plunging into the cold bath, so that they may not catch cold on going into the open air; our readers know, of course, that the Roman bath consists of going into a series of rooms, heated with hot air, and this heat induces very generous perspiration.

We next enter the Tepidarium which is fairly warm, and then the Caldarium, which is really quite hot; here there is a bath of hot water, and at one end a basin of cold water, with which to splash oneself before passing out. It is here that we are anointed with oils, and our bodies massaged and scraped with strigils, as Fig. 20; then we, in our turn, pass back to the Frigidarium and have our cold plunge, and sit about to watch the goings-on. Seneca, the philosopher, writing about 57 A.D., gives a better idea of life as seen in a Roman bath than we can. He said, "I am living near a bath: sounds are heard on all sides. Just imagine for yourself every conceivable kind of noise that can offend the ear. The men of more sturdy muscle go through their exercises, and swing their hands heavily weighted with lead: I hear their groans when they strain themselves, or the whistling of laboured breath when they breathe out after having held in. If one is rather lazy, and merely has him-

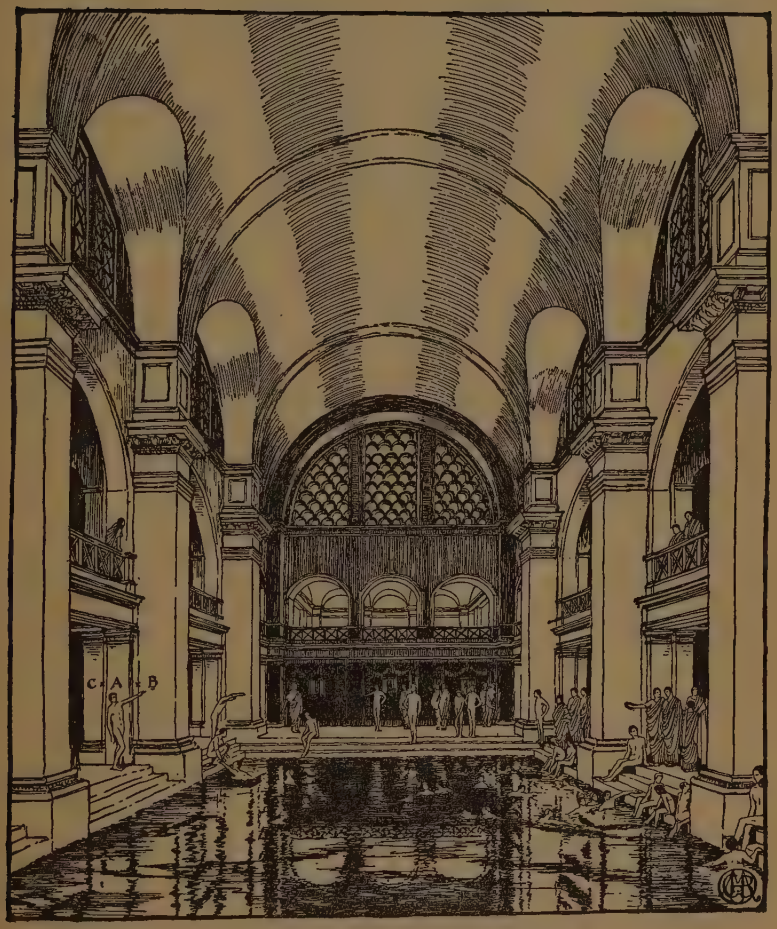


FIG. 22.—The Great Bath at Bath.

self rubbed with unguents, I hear the blows of the hand slapping his shoulders, the sound varying according as the massagist strikes with flat or hollow palm. If a ball-player begins to play and to count his throws, it's all up for the time being,"—then follows an amusing note, "or there is some one in the bath who loves to hear the sound of his own voice; . . . but the hair plucker from time to time raises his thin shrill voice in order to attract attention, and is only still himself when he is forcing cries of pain from some one else, from whose armpits he plucks the hairs."

Fig. 21 shows what the exteriors of the Baths at Silchester are like, and for a small town they are fine buildings, unless, of course, they are compared with those at Bath, or Aquæ Sulis. Here the hot springs of healing waters have been conducted to great basins in which the people can bathe, and grouped around these are the ordinary rooms of a Roman bath as at Silchester. We give a sketch (Fig. 22) of the Great Bath, taken from the E. end. So far as we can judge this bathing-pool must have been open to the sky, when it was first built, with a colonnaded walk around, as at A on the sketch. Later it was roofed in with a vault made of concrete

reinforced with hollow tiles, and to carry this, large stone piers were added at B. By cross vaults the architect contrived that these piers at B took all the weight of the vault adding arches at the back to take up any outward thrust; these were carried on piers, one of which is shown at C.

The parts remaining of this vault at Bath, give the best example we have in England of the Roman use of concrete reinforced with brickwork. In Rome, itself, the baths of Diocletian and Caracalla, the Basilica of Constantine, and the Pantheon, are examples of vaults which are wonderful in their immense scale and permanence. It is very doubtful if any of the modern concrete work, reinforced with steel, will last even one hundred years against the insidious rust. After our bath, being in good order, we go to the church, there to return thanks for our safe journey, and we find that the citizens of Calleva, very soon after the Edict of Toleration of the Emperor Constantine in 313, set about building themselves a Christian church. This is shown at 6 on Fig. 15.

The plan of the church is shown on Fig. 23, and is known as the "Basilican type," this means that it resembles the Basilica (Fig. 34). The points of

FIG. 24.—Interior of Church at Silchester.

resemblance are, that the main body is divided into a nave, with an aisle on each side, and the tribune of the basilica has become the apse of the church. The plan shows the beginning of Transepts, which give the church its cruciform, or cross-like character.

It is worth considering how this came about. Take a sheet of clean paper, and try to design anything you like; you may start with the idea that you are going to be wildly original, and then you will discover, that originality consists of minute variations and improvements on what has gone before, and you will be forced to go back to something you know as a base on which to build. This is precisely what the first builders of Christian churches did; they started by adopting the basilica, because it was the building in which they had been used to assemble; the interest to us is, that the little church at Silchester is the forerunner of our glorious Gothic cathedrals.

We must remember that the Society of Antiquaries, who excavated Silchester, only discovered the foundations of the building; the reconstruction built on these is our own. We will enter the church, and our first impression, as Fig. 24, is one of sur-

prise at the tiny size of the building; the nave, including the apse, is only 29 feet long by 10 feet wide; the aisles are 5 feet wide. The nave has a mosaic floor, the tesseræ of which are red tiles 1 inch square; where the altar stands is a very beautiful panel of chequers in black, red, and white, and this part of the floor is not raised above the nave.

Let us now leave our imaginary walk and look at the drawings. Fig. 25 is a reconstruction, built up on the plan about which there is no doubt. For the superstructure, we have gone to Rome. After Constantine's Edict of Toleration, church building went forward, and the Christians had no need to lurk in byways. It is to this period that we can assign the five patriarchal basilicas, of S. Peter, S. John Lateran, S. Maria Maggiore, S. Paul, and S. Lorenzo, beyond the walls at Rome. The old basilica of S. Peter was pulled down at the end of the fifteenth century to make room for the present church, and the others have been altered many times, yet sufficient remains to show what the early churches were like. Constantine is supposed to have helped dig the foundations of S. John Lateran with his own hands.

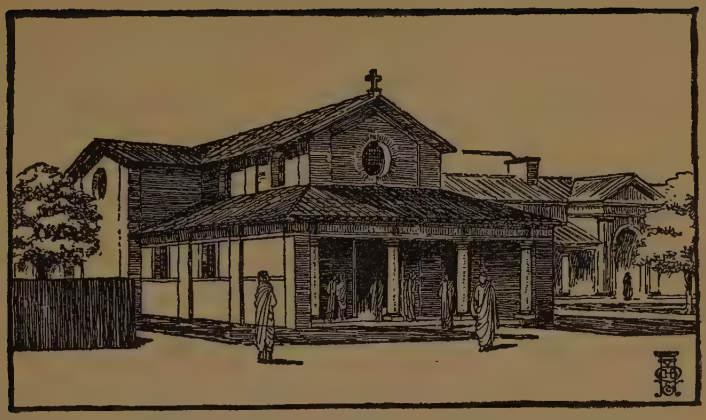


FIG. 25.—Exterior of Church at Silchester.

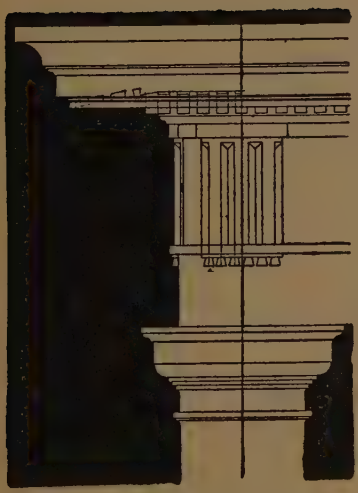


FIG. 28.—Roman Doric Order (Theatre of Marcellus, Rome).

FIG. 29.—Roman Ionic Order (Theatre of Marcellus, Rome).

The Silchester church was a much simpler building; its flint walls, with tile angles outside, were plastered inside, and painted in imitation of marble.

During mass the priest stood facing eastwards, behind the altar, which was probably a wooden table.

In the larger basilican churches it was usual for the clergy to be seated around the apse behind the altar, but there is hardly room for this arrangement at Silchester, and they probably used the nave together with the choir. Men and women were seated separately in the aisles. It will be noticed that there is a very large porch, or Narthex. Here with the doors open, were gathered the people not yet admitted to full communion.

This Narthex, in the larger basilican churches, like S. Peter's, formed one side of a square courtyard, or Atrium, which stood in front of the church. There is a splendid example at the later church of S. Ambrogio in Milan, and another delightful one at S. Clemente in Rome.

We cannot be sure if there was such a court at Silchester, but a foundation was discovered in front of the porch, with a little pit behind it, and this is thought to have been the base on which

stood a laver, or labrum, where the worshippers could wash their hands; the pit having a drain connected with it. This laver may have been placed centrally in an eastern court, paved with flint pitching, of which part remains. Very little more can be said of what is one of the most interesting buildings in England, built between 313, and the withdrawal of the Romans about a century later.

Here and there in England, smaller Christian relics of Roman date have been discovered. One of the most interesting of these is the pewter bowl in the British Museum, discovered in the well of a Roman house, at Appleshaw, near Andover, not far from Silchester. This bowl has the sacred monogram, Chi-Rho, composed of the two first Greek letters of the name of Christ, as Fig. 26, engraved on its base.

There are hints, in writers of the period, of British converts to Christianity early in the third century. S. Alban was martyred in 304, and three British bishops attended the Council of Arles in 314, which is evidence that, by this time, the converts had organized a Church. Then we have S. Patrick, the 1462nd anniversary of whose death was

Early Temples, Pt. II. pp. 81, 95.

FIG. 27.—One of the Temples at Silchester.

recognized on 17th March, 1924, by the dedication of a mosaic to his memory, in the Houses of Parliament at Westminster. S. Patrick's name was Sucat, and he was the son of Calpornius, a Roman official, who was a deacon of the Church, and whose father had been a priest. S. Patrick was born about 373, either in Dumbarton, or Glamorganshire, and was carried off by slave raiders to Ireland when a youth. Here he stayed six years, and then escaped to Gaul, whence, being trained in the Church, he went to Rome, and finally returned on his mission to the Irish about 437 or 438, where the Christians stood in need of his help.

We shall write of the influence of the Irish Church in our next book, but sufficient has been said now, to show that the Christian Church in this country was not the work of Augustine only.

There were four Temples at Silchester in pre-Christian days, and these are shown at 5, Fig. 15. Fig. 27 illustrates one of these near the East Gate. During the excavations of the Society of Antiquaries, the foundations of a platform, 73 feet square, were discovered. The platform itself was $7\frac{1}{2}$ feet high, and in the middle of it stood the Cella,

which was 42 feet square outside, and 36 feet inside. The drawing is our reconstruction based on this plan.

The foundations of what must have been a very beautiful and interesting Temple were discovered to the S. of the Basilica. The platform here had a regular 16-sided plan of 65 feet diameter. The Cella placed centrally on this was 35 feet 7 inches in diameter, with walls which were 2 feet 6 inches thick, and 16-sided externally. This left space for the Cella to be surrounded by a colonnaded walk or Peristyle, 9 feet 6 inches wide, and the effect must have been like the Temple of Vesta at Tivoli, or the beautiful one in the Forum Boarium at Rome.

Now that we are writing of temples, it may be well to make reference to the Orders of Architecture, which the Romans used in their construction. We illustrated those of the Greeks on page 34. The Romans adopted them, but changed them as they went along. The Doric, as Fig. 28, from the Theatre of Marcellus at Rome, has been used in Figs. 25 and 27. The Ionic, also from the Theatre of Marcellus, was as Fig. 29. The Corinthian, from the Pantheon, Rome, was as Fig. 30;

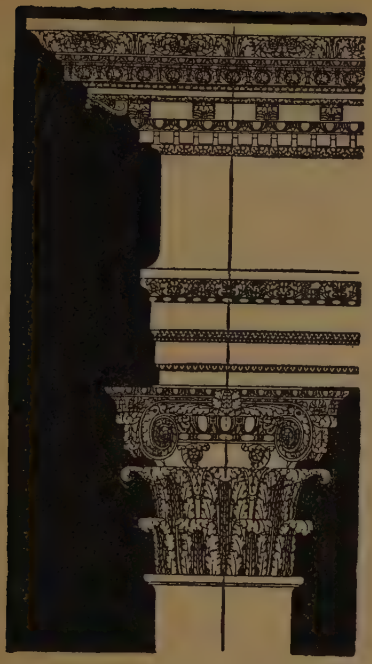


FIG. 31.—Roman Composite Order (Baths of Diocletian, Rome).

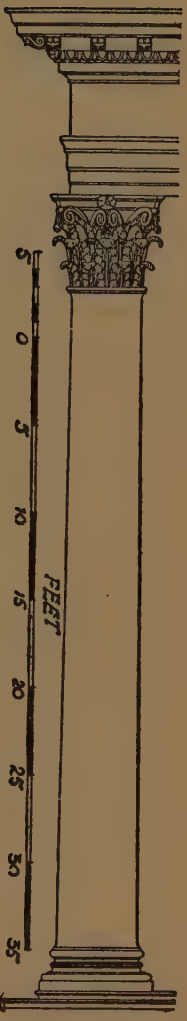


FIG. 30.—Roman Corinthian Order (Portico of Pantheon, Rome).

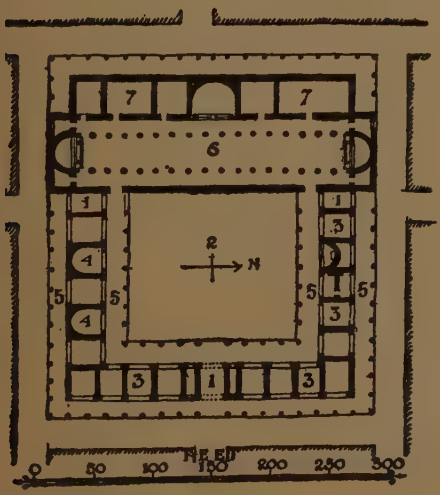


FIG. 32.—Plan of Forum and Basilica at Silchester.

and the Composite, from the Arch of Titus, Rome (Fig. 31), was, as its name shows, composed of a fusion of Ionic and Corinthian. These Orders, together with the Arch, were the raw materials with which the Roman architect worked, and his finished products, in the way of buildings, are the main inspiration of his successor of to-day.

If it had been possible for us to walk the streets of Roman Silchester, as we at first pretended, after breakfasting at our inn, we should go to the Basilica, to transact the business which brought us to the town. The Basilica, as we have seen by 2, Fig. 15, stood in the centre of the east side of the street running through the town from N. to S.; if we go two islands to the W., and two to the E., and then take two N. and S., we find that the streets are planned on a regular square. If Silchester had been a purely Roman town, this square would have been walled in, as was Caerwent in Monmouthshire, close to Caerleon where the Second Legion was stationed. It rather looks as if this central portion at Silchester was the first portion built, as early as 70–85 A.D., and the walls, enclosing about 100 acres, were built at a later date to follow the lines of the British earthworks.

The broadest roads in the town were about 28½ feet wide, and formed of a bed of hard gravel, pitched with flints in the centre, to form a gutter.

The Basilica formed part of a group of buildings as Fig. 32. This plan is very remarkable and shows us that the Romans were quite used to buildings planned on an axial line, with a sense of dignity and order. We know that there had not been any such building done in England before the time of the Romans, and after them we shall have to wait till the sixteenth century before we find these ideas again.

The Gateway at 1, Fig. 32, led into the Forum, or Greek Agora, as Fig. 33. This was the market-place of the town, and around it at 3, Fig. 32, were shops. Here the slaves came to do their marketing, and the county people set up little booths. It was used as well for games, and gladiatorial contests before the amphitheatre was built. The municipal offices were at 4, and colonnaded walks at 5. These connected with the Basilica at 6. This consisted of a fine hall, about 233 feet long by 58 feet wide; here the merchants met to do business, as they do at the "Baltic" to-day. At each end were the semicircular tribunes where Justice was ad-

FIG. 34.—The Interior of the Basilica, Silchester.

ministered. In the centre of the W. side was the Curia, or the Council Chamber of the City, with other halls and offices, at 7.

Fig. 34 shows what the interior of the Basilica looked like. This reconstruction is possible, because part of one of the Corinthian capitals was found, and this settled the diameter of the columns. In Roman architecture the height of a column bears a definite relation to its diameter, and again the entablature over, consisting of architrave, frieze, and cornice, has a definite proportion. During the excavations, portions of Purbeck marble and an imported white marble were found, and it is thought that these were used for wall linings. The portions not treated in this way were plastered, and painted gaily with light red, yellow, white, blue, and green. The world has only become grey in colour since the Industrial Revolution.

We will here insert a reminder that before the Christian era, a Basilica was a place such as we have described, but that after, the word was used at times for a Church.

This group of buildings, in more ways than one, formed the civic centre. It is interesting to remember that the word civilization comes from

civis, a citizen, one who had mastered the art of living in a town. The Atrebates seem to have managed it very well; better, in fact, than we do to-day, with our hopeless struggle to make the dreadful industrial towns fit places to live in.

During the excavations no trace of buildings was found to the S. of the Basilica, behind the church, so this space may have been the cattle market, and another open space on the east may have been used for the farmers' carts.

Silchester does not provide us with a specimen of one of the great accomplishments of the Romans, the arched bridge. It is a great pity that they did not feel tempted to span the Thames with bridges like the Pons Ælius and Pons Fabricius at Rome.

Before we study the smaller details of Silchester, it would be as well if we again looked at its lay-out, as shown in Fig. 15, and consider what it means. True, there are the later walls, added when times were becoming troublous, but even with these it presents a very civilized picture. It is not dominated by a castle, with moat and drawbridges, as was the case with the towns which were built in the Middle Ages. The people of Silchester

FIG. 33.—The Forum and Basilica at Silchester.

FIG. 35.—Mosaic Floor, Baths of Caracalla, Rome.

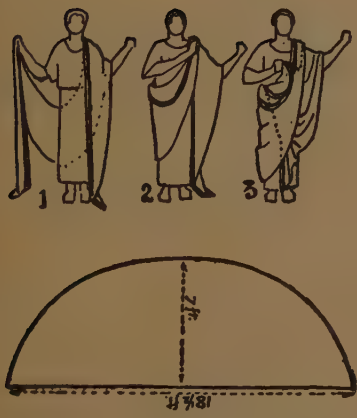


FIG. 37.—Pattern and Putting-on of Toga.

FIG. 38.—Hair-dressing.

may have needed protection from raiders, but nobody frowned at them from inside. Here they were able to lead a life which was free, and gave them opportunities to develop their own individual tastes. Later the Barbarian raids forced men together in packs, and a common fear made them wolfish; the monastery was to become the one place in which a man could do quiet work, and the cloak of Religion the only substitute for a sharp sword. The world had to wait a thousand years or more before it was to see again any town planned on such kindly lines as Silchester.

CHAPTER III

THE PEOPLE AND THEIR HOUSES

THE time has come to write about the people who lived in Silchester. We have set out our stage, and the drawings we have made must be accepted as the scenery. Against this background we will place our figures, but, alas, we cannot endow them with life, nor even jerk them with little strings, as marionettes, from the top of the stage. The imaginations of our readers must supply the motive power.

Fig. 36 shows some of the types one might have seen in a walk round Silchester in Roman times. The central couple is a higher Magistrate and his wife. He wears the Toga prætexta, made of white wool, with a purple border, this was worn as well by priests, and freeborn children until they grew up. Under the toga came the tunica, with the purple border if the wearer was a senator. The

FIG. 36. Costume in Roman Times.

toga developed from the cloak, which in early times had been the national garment, and in the Empire was the ceremonial dress of the upper classes. Linen was not used before the Empire.

Fig. 37 shows how the toga was put on. About 6 feet of the straight edge was placed over the left shoulder, the curved side being outside, the remaining part of the toga was passed round the body, under the right arm, and then thrown over the left shoulder as 2. The part which hung down in front from the left shoulder was then pulled up under the fold across the body as 3. We suggest to our readers that it might be very good fun to make togas in some cheap material and dress up as Romans. Women wore the Stola, a form of tunica, with an undershift (*subucula*), and their mantle was an oblong-shaped piece of material which was worn as the left hand figure in Fig. 36. This was the Palla. The Tunica was the indoor garment for men and women; sometimes, as shown in the central woman in Fig. 36, it was sleeveless, and then the undershift had sleeves.

Rough tunics were worn by shopkeepers and workmen, like the left-hand man shown in our drawing, and we must bear in mind that mingling

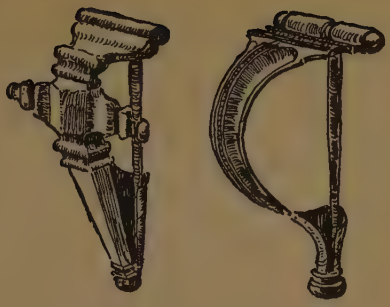
with the crowd we should have met in Silchester, would have been figures wearing the old British costume we described in Part II. The right-hand pair of figures are clothed in this way, but the man wears in addition the hooded cloak (*paenula*), a very useful outdoor garment. This hood was to remain until in the fourteenth century it was lengthened into the liripipe, hanging from the chaperon, and finished by snuggling down into a turban.

As well as sandals, heavy leather shoes studded with nails were worn. Fig. 38 shows a method of hair-dressing which was fashionable in the days of the early Empire, and Fig. 40 is a jolly little carved bone pin which may have been used for the hair.

In Fig. 77, Part II., we traced the very beautiful lead developments of the Brooch (*fibula*): how, from a simple safety-pin, it became a very elaborate affair with bi-lateral springs. These continued in Roman times, but in the early Empire we find hinged brooches, as Fig. 40. The ones illustrated were made of bronze, and then tinned to look like silver.

Had we been walking round Silchester in Roman

FIG. 39.—
Bone Pin.



Early Brooches, Pt. II. pp. 118, 185, 187.
FIG. 40.—Bronze Brooches.

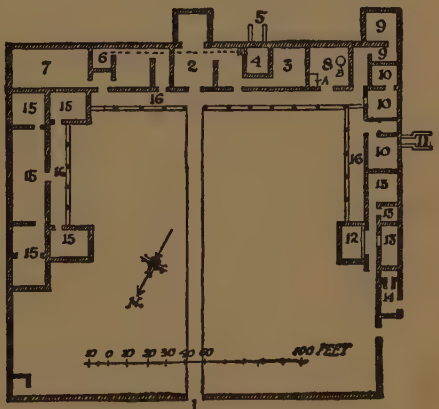


FIG. 41.—Plan of Roman Villa.

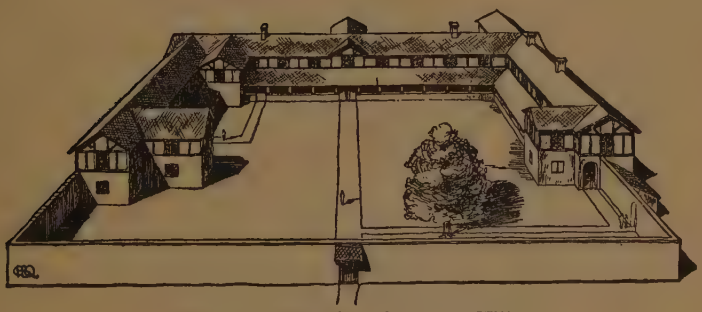


FIG. 42.—Exterior of Roman Villa.

times, we should not have found all the people in togas to be pure Romans, and those in tunics, Britons. If we remember how small a State was the original Rome, we can see that there would not have been enough Romans to go round. One of the ways in which the genius of the Romans was shown, was their ability to absorb very varying peoples into their midst, and endow them with the Roman spirit. The great Trajan himself was a Spaniard. Fig. 78 shows the tombstone of a legionary, who, though he was born in Macedonia, lived and died in Lincoln. He may have had a British wife, and told his Romano-British children tales of what he did when he was a boy.

Having seen something of the people and their appearance, we can now pass to the Romano-British houses, and nowhere shall we find a better illustration of Roman skill. The Roman house of Italy was built round small courtyards to exclude the sun. The entrance from the street led into the first of these called the Atrium, which was roofed over except for a central opening, the compluvium, above a shallow basin in the floor, the impluvium. There were small bedrooms at the sides of the Atrium, and the Tablinum, or recep-

tion-room, was opposite the entrance; this room also opened on to the Peristyle at the back. This was the garden surrounded by colonnaded walks at the far end of which, opposite the Tablinum, was the Exedra, which answered the same purpose as a modern drawing-room.

The Roman in Italy built his house around a courtyard, but in England he wisely realized that he could not afford to shut out the sun, and so opened up the whole plan.

Fig. 41 shows the plan of a Roman villa, at Spoonley Wood, Glos., drawn from information provided in an article by Professor J. Henry Middleton, in *Archæologia*, vol. lii. Here we have the entrance at 1 leading into a large courtyard, or combination of Atrium and Peristyle, and this leads, as in the real Roman house, to the Tablinum at 2. The Triclinium, or dining-room, was at 3, with a specially heated room, for use in winter, at 4. As the heat from the stokehole (5) is taken under all the rooms to 6, these appear to have been reception-rooms. Room 7 was not heated, so may have been a summer-room. The kitchen was at 8, with larders and stores at 9. The three rooms at 10 are heated from the stokehole at 11, and so

FIG. 43.—Courtyard of Roman House.

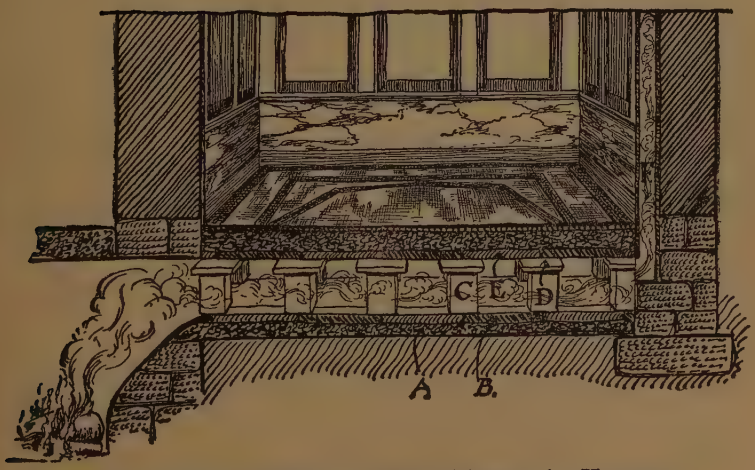


FIG. 45.—Roman Method of Heating Houses—by Hypocaust.

must have been for winter use, or for other branches of the family living under the same roof. Rooms 12 and 13 were the bathrooms cut off from the house, with their own separate entrance from the courtyard. The three rooms (13) were heated from a stokehole at 14, and were the Frigidarium, Tepidarium, and Caldarium. At 12 was the cold bath, 16 feet by 11 feet 6 inches, quite big enough for a plunge and kick about. Evidently cleanliness ranked high as a virtue in Roman times; very much higher than in the time about which Thackeray wrote in *Pendennis*. Here the old Benchers in the Temple complained bitterly about the water which was spilled on the stairs when being carried up for Warrington's and Pendennis's baths; they had always managed to do without baths, why did these wretched youngsters want to go in for them? As Thackeray points out, our ancestors, of not long ago, were the "Great unwashed."

The slaves' quarters are supposed to have been at 15, without any communication with the house, except through the courtyard. This completes the description of the plan, and so far as its form is concerned there is not any doubt at all; when we

come to the structure which was raised on it, we are on more debatable ground, and it may be well for us to describe how we have built up the exterior shown in Fig. 42. The colonnaded walks at 16 had dwarf columns standing on low walls. We know this because the columns which supported the roof were found at Spoonley Wood, $6\frac{1}{2}$ inches diameter, and the Stonesfield slates with which it was covered. This is shown in more detail on Fig. 43. The same thing happened at Silchester. Here it was that a valuable clue was gained as to the construction of the upper floors. In excavating it was noticed that some of the ground floors were covered to the depth of a few inches with a layer of clay, which, on careful examination, showed marks of wattling. Wattle and daub construction is known to have been used at the Glastonbury Lake Village (Part II. p. 176), and consisted of daubing a mixture of clay and chopped straw, on to wattled hurdles, fitted in between timber framing. It was thought that the clay on the floors at Silchester was the remains of a timber-framed upper storey, that had decayed, and fallen down. The appearance of the upper part of a Roman house would have been rather like mediæ-

FIG. 44.—Roman Triclinium or Dining-Room.

val half-timbering, though our drawing looks more like a golf pavilion of to-day.

At Spoonley Wood, the ground-floor walls were built of local stone, and average 2 feet thick, and in almost all cases the walls of Roman houses were covered with stucco and coloured.

Fig. 44 shows the Roman Triclinium, or dining-room, and how the diners reclined on low couches round a centre table. It seems an uncomfortable method of feeding, and one of the authors, who, stretched on the hearthrug, served as the model for the figures, has no wish to have dinner in that position.

We referred, on p. 92, to the heated floors at Spoonley Wood. Fig. 45 shows how this was done, and it was a very clever method. If an architect to-day is designing an operating theatre in a hospital, he adopts the Roman way of heating the floors and walls, because it prevents the humid air from condensing on the walls, which it will do if they are cold. The Roman architect started with a layer of concrete at A, on this he placed large tiles at B, and built thereon square piers, or *pilæ*, C. On these were placed as caps square tiles at D, and others were bridged across at E, on this the concrete floor was formed, with its mosaic covering.

The stoke-hole was outside, and here a slave made the fire, which he may have pushed right under the floor, the degree of heat being settled by the amount of floor which could be reached by the fire under; if an ordinary room, for use in winter, was to be heated, then a duct from the furnace, led to a central area, from which other ducts led to the vertical wall flues; if it was the Caldarium, or hot room of a bath, then the whole floor was suspended over the heating space, and the wall flues were multiplied, and gathered into chimneys much in the modern way.

Fig. 45 can be used to describe the way the Romans decorated their rooms. The walls were plastered, and then painted in very joyous colours. At Reading Museum there are pieces of the plaster found at Silchester, showing traces of vivid colour, and painted decoration; these seem to be based on imitations of marbles, and the effect, taken in conjunction with the mosaic floors, must have been very fine.

The floors of the houses at Silchester were finished in a variety of ways; in some mosaic was used, as in the Frontispiece, Fig. 1, which has been drawn from a floor found there. In others, the

FIG. 46.—Mosaic Worker.

FIG. 47.—Lamp.

Early Pottery, Pt. II. pp. 52, 57, 135, 206

FIG. 49.—Samian Bowl.

FIG. 51.—Decoration on Castor Ware.

final coat was formed with a cement made of lime and small fragments of broken brick, which was rubbed down to a smooth surface, and then polished; this was called *opus signinum.* The mosaic floors were formed of small cubes, of differently coloured materials; black and orange sandstones, white and grey limestones, yellow and red bricks, and Purbeck marble. Fig. 46 shows the mosaic worker, cutting sawn sticks of these materials into the cubes, or tesseræ; he holds the stick on the top of a chisel, set in a wooden block, and cuts the cubes by tapping with the hammer, just as the old-fashioned sweetstuff man used to do. The hammer and chisel were found at Silchester. The commoner floors were laid with larger cubes. If an old Roman floor is examined, it will be found to have a pleasant hand-made appearance, whereas modern mosaic looks like its imitation in oil-cloth.

Windows were glazed at Silchester, and the glass appears to have been cast in moulds, in the shape of the panes; it is just one more illustration of the fascination of History; here we are writing of window glass, and scientifically heated houses, and in a century or so, the fabric of civilization itself crumbles away, and we must wait until the thir-

teenth century before we find glass again in this country, and our twentieth-century houses are not yet so well heated.

For artificial light, candlesticks were used, and lamps in which oil was burned, as Fig. 47. We can now think of the very important detail of cooking, and in Fig. 48 we see a Gridiron, found at Silchester, and the method of using it. All cooking was done on a raised hearth made of masonry. One of these was found at Pompeii, with the pot in place, just as it was when destruction fell on the city. The charcoal used for fuel was kept in the arch below. The fire was made on this open hearth, and the charcoal fumes, which are dangerous, must have been carried away by a hood over the hearth into a wall flue. We are indebted to a friend for an account of how cooking was carried on in a Florentine kitchen, as late as 1893; the same open hearth as shown in our illustration was used. In this were small holes about 9 to 12 inches square, and 6 inches deep, in which fires were lighted, and pots boiled in the ordinary way, or food was fried, or grilled. Many vegetable dishes were used, or just the leg of a chicken fried in olive oil. It was when any baking had to be done that trouble

FIG. 48.—Roman Kitchen.

arose; because the Italian seldom bakes, but prefers frying and boiling; they do not go in for puddings, but buy them at the cake shop. When they have to bake or warm up anything, they used a *Forno di Campagna*, or oven of the country, which consisted of a large round pan, like a saucepan, standing on legs; this was put over the fire, and a flat cover being placed on the pan, another small charcoal fire was made on the top, and the cook, with a fan, regulated the amount of heat. This somewhat resembles the old west-country method described in our book *Everyday Things* (Part I. p. 170), and it may explain why it is that brick ovens are not found in the ruins of Roman houses in this country.

The Romans in this country may have been like the Florentines of 1893, and not such great meat-eaters as the Barbarians they conquered.

The cook shown in Fig. 48 is making a sauce in a bronze skillet or saucepan, and a stew is simmering in the bronze cooking-pot. The large pots on the floor are used to keep oil and wine in, and a flesh hook hangs from the end of the shelf. The oil-burning lamp was found at Newstead, a Roman fort near Melrose, in Scotland. On the table is a

lipped vessel called a mortar, which had pieces of grit worked into the surface of the clay before it was fired, so that vegetables and other food could be rubbed down in it. Corn continued to be ground into flour in mills as shown in Fig. 71, Part II.

Food was sent up to the table, in what is perhaps the most typical of all Roman pottery, the fine red glazed ware we call Samian, or *Terra sigillata*. This was made originally at Arezzo in Tuscany, and then spread through the Empire, and being copied by the potters of Gaul, was imported into Britain. The ornament was impressed from a mould. Fig. 49 shows a typical shape. There are, in the British Museum, some specimens of plain Samian ware, which have been dredged up from the Pudding-Pan Rock near Whitstable, Kent, where they had been since the vessel which was bringing the pottery was wrecked in Roman times.

Castor ware, as Fig. 50, was made at Castor, near Peterborough, so it is a peculiarly British pottery. It appears to have been founded on Samian, but it is copper or slate colour, and the white ornament in low relief is not cast as the Samian, but executed with a pipe like the sugar

FIG. 52.—New Forest Pottery.

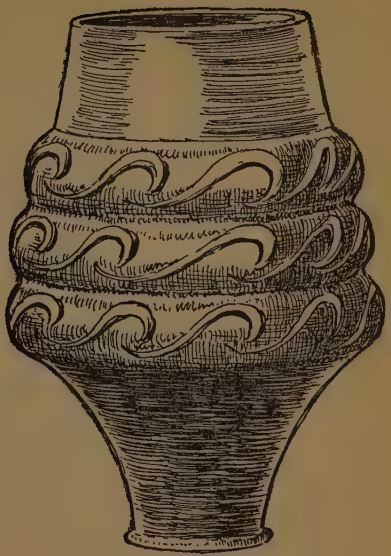


FIG. 50.—Castor Ware.

FIG. 53.—Roman Glass.

FIG. 56.—Scales from Silchester.

decoration on a wedding cake. This ornament has a freedom which is Celtic in its joyous curves. Fig. 51 shows a hunting scene from another Castor vase.

Very interesting pottery was made in the New Forest, as Fig. 52; this was generally reddish-brown or black.

Fig. 53 shows some typical specimens of Roman glass. As was the case with the Samian ware of which we have been writing, the glass was first manufactured in the S. of Gaul, and then in the second century, in Belgium and at Cologne, and imported into Britain from there. This stimulated the British craftsmen, and it is thought that the simpler types which are found are their copies of the imported wares. A visit should be paid to the Roman-British Room, at the British Museum, where can be seen a most wonderful pillar-moulded blue glass bowl. This was discovered quite recently on the Chiltern Hills, under a carriage drive. The bowl was only a few inches below the surface, and formed part of the furnishings of a grave. By a miracle the pick made a small round hole through the bowl, but did not crack it, so the Museum possesses the only complete bowl of that kind of glass found as yet in England.

Fig. 54 shows how the householder at Silchester provided himself with water. The drawing is a reconstruction of a force-pump found there. The rocking arm worked the pistons, which, moving up and down in their cylinders, sucked up the water from the well underneath, through the valves as shown. The descending piston shut one valve, and forced the water into the central reservoir through the other, and so up to the discharge pipe.

Great attention was paid to the details of sanitation. In Crete, Sir Arthur Evans discovered an excellent system which at a much earlier period made use of jointed drain-pipes; and underground sewers, flushed with water, were used by the Romans from a very early date.

Trades and Industries

From House and Home Life, we can now turn to the Trades and Industries which supplied the inhabitants of Silchester with the everyday things they needed. The principal shops were in the Forum, because this was the central meeting-place of the town, and they were very simply planned. The front was formed by a square opening in the

FIG. 55.—Roman Shop.

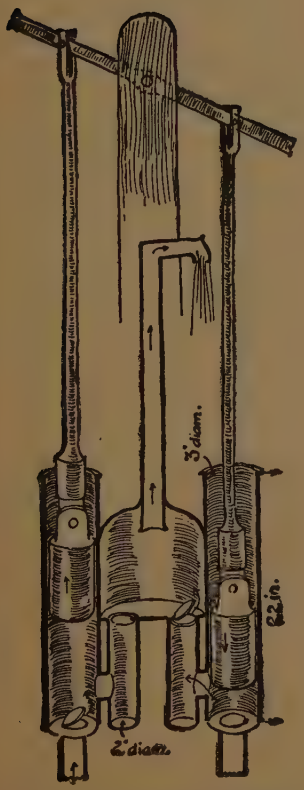


FIG. 54.—Pump from Silchester.

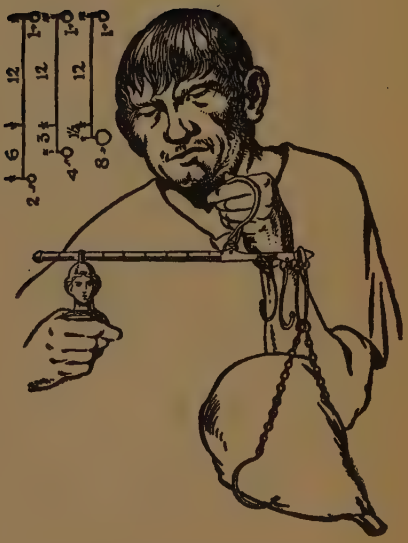


FIG. 57.—The Roman Steelyard.

wall, as Fig. 55. In this was placed the counter built of masonry, with a gap at one end through which the shopman could pass, the customer preferring to stand on the pavement. A staircase led directly out of the shop to an upper room, and sometimes there was another room at the back of the shop. The shops were closed by wooden shutters, placed in grooves at top and bottom, and overlapping much as they used to do in England until the advent of roller blinds in recent times.

To-day if you go into the back streets of an Italian city, or one of the smaller towns, you can find the shops still remaining much as we have described. In the larger places, also, the hideous output of modern industry is very barely veiled behind plate-glass, as in our own London.

Fig. 56 illustrates an interesting pair of scales found at Silchester. The beam is a bronze, about 13 inches long, and graduated on the top, so that the instrument is a combination of steelyard and balance. Assuming that the fish being weighed is over 1 lb. in weight; a 1-lb. weight would be placed in the opposite pan, and another 1-lb. weight would be moved along the beam until the weight of the fish was balanced. If the fish were

under 1 lb., then a 1-lb. weight would be placed in the opposite pan, and the other used on the beam, but this time on the same side as the fish. It was an extremely clever way of dispensing with many small weights.

The steelyard works on the laws of leverage we explained in Part II. page 87. These may be summarized in the diagram on Fig. 57. Imagine that these are the beams of steelyards; a 1-lb. weight 12 inches from the point of suspension will be balanced by a 2-lb. one on the other side 6 inches away; again, 1 lb. 12 inches away, equals 4 lb. 3 inches away, and 1 lb. 12 inches away, equals 8 lb. only $1\frac{1}{2}$ inches away. This will serve to explain the ingenuity of the Roman scale shown in Fig. 57. The leg of lamb is hanging by hooks and chains to a ring with a movable collar on the beam. If something heavier had to be weighed, the man held the scale by the middle hook, turned the beam round, and brought another graduated scale into use; by our diagram we see that with the same weight of 1 lb. at 12 inches, he could weigh 4 lb. at 3 inches, or 8 lb. at $1\frac{1}{2}$ inches. This is the reason for the three handles. The butcher shown in Fig. 58 has a steelyard hanging up be-

FIG. 58.—A Butcher's Shop.

hind him, and while he cuts up the joints, his wife enters the weights on a wax tablet with a stilus.

Interesting discoveries of tools were made at Silchester. In 1890, and again in 1900, when wells were being cleared out, hoards were discovered of very varying types. It is interesting to speculate how this came about. It is easy to understand how broken crockery, and other oddments, were found in wells and cesspools; a careless person would throw them down to get rid of them, but a careful workman would not do this with good tools. In 1854, at Great Chesterford, Essex, another hoard was found, 6 feet deep in a pit, so it looks as if in the perilous times either at the end of the Roman occupation, or during the Saxon Terror, the workman buried his tools, hoping to be able to come back some day and start work again, and as he was not able to do so, there they have lain until discovered by the archæologist of to-day.

The actual tools found at Silchester can be seen at Reading Museum, and so we are enabled to show the Roman at work. Fig. 59 shows a smith using a pair of tongs which are quite modern in type. Besides making his own tools he would have made those for other tradesmen.

The carpenter shown in Fig. 60 has a metal-faced plane, $13\frac{1}{4}$ inches long by $2\frac{1}{4}$ inches broad, and was well provided with chisels, gouges, adzes, hammers, and axes; all the Silchester axes had hammer heads. He uses the same kind of saw as Italian carpenters of to-day. All the nails used would have been made by the smith. He made the mowers' anvils shown in Fig. 61; these were tapped into the ground, and used by men to temper the scythes with which they cut the corn. It is assumed that the strange-shaped implement the man is hammering, which was found at Great Chesterford, is a scythe; the one at the top of the picture from Newstead is a better shape.

The smith provided the iron last shown in Fig. 62, and with it the shoemaker mended shoes as shown.

The smith, in fact, must have been a very handy man; an adze was found (2, Fig. 60) with a curved cutting edge, which suggests its use by coopers to hollow the staves of barrels. The coulter, A, shown in Fig. 63, helped the ploughman, and points to an improvement on the plough described by Virgil in the *Georgics;* this consisted of a share beam to which was attached the iron share, B, the

Old Stone Age Tools, Pt. I. pp. 49–54, 62, 65, 70, 73, 109, 130, 152.
New Stone Age Tools, Pt. II. pp. 33–44, 48–52.
Bronze Age Tools, Pt. II. pp. 108, 111.
Early Iron Age Tools, Pt. II. pp. 185, 193.

FIG. 60.—Carpenter and his Tools.

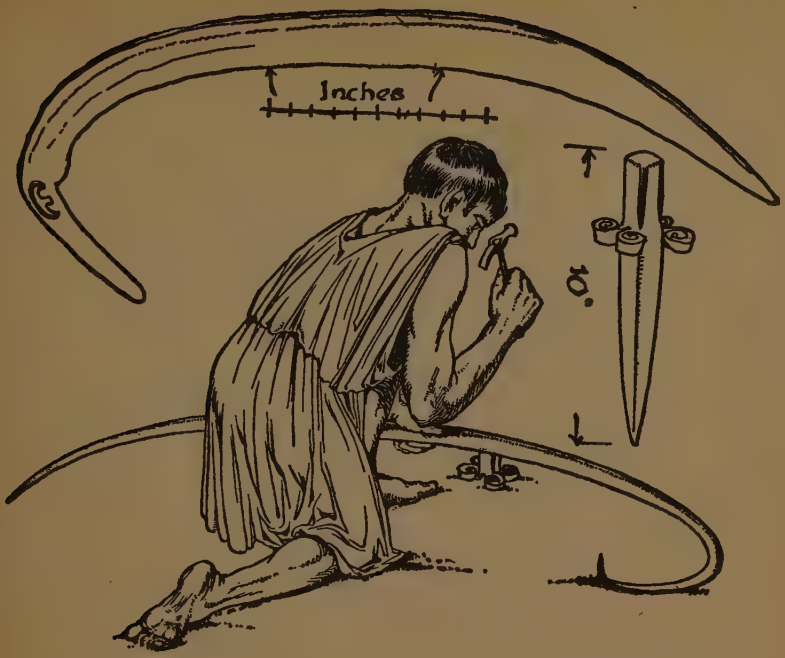
shaft with a yoke, and a verticle handle; not, in fact, very different from the primitive type shown in Fig. 60, Part II. By the introduction of the coulter a vertical cut was made in the soil and this could then be turned over far more easily by the ploughshare. We have attempted to show, in Fig. 63, how we think the coulter was applied to the plough of the Romans.

The smith made large heavy padlocks of what seems to us an extraordinary pattern. Fig. 64, shows how these were operated; the key was inserted at the top into a slot, pushed into a vertical position, and was then forced down until it engaged with the four vertical rods shown by dotted lines. On the top of the rods were welded flat pieces of iron which were free to spring out at the bottom. The key was perforated to fit down over the ends of the rods, and being pushed down, compressed the flat springs, so that this portion could be drawn off A. We cannot say what the uses of the padlock were. At Great Chesterford five handcuffs were found, attached to a smaller padlock of the same pattern (Fig. 65); in the barracks of the gladiators at Pompeii, remains of stocks were found in the guard-room, which worked on much

the same principle, so that here in England the padlocks were perhaps a means of discipline for slaves.

The Romans, being men of property were quite used to locking up things. The simplest type of lock was one which had come down from Greek times, like the top sketch in Fig. 66. Here a long key was pushed through a verticle slot, then, being turned round, was hooked into two pegs or tumblers (2), which, being lifted up, allowed the bolt (1) to be drawn back by a leather thong (3) from the outside. In the centre sketch of Fig. 66, the pegs or tumblers (2) are kept down into the bolt (1) so that it is locked by a spring (4); to unlock the bolt a key, rather like a toothbrush at right angles to its handle, is placed under the bolt, so that the tumblers are pushed up, and the bolt can be drawn back by the key.

The sketch at the bottom of Fig. 66 shows how the tumbler type developed into the Lever lock. The tumbler has become a projection on the underside of (2), which turns on a pin, and is kept in position by a spring at (3). The tumbler prevents the bolt (1) being shot back by dropping into a slot in it. The key is inserted and turned, and



Sickles, Pt. II. p. 51.

FIG. 61.—Scythes and Mower's Anvil.

FIG. 62.—Shoemaker.

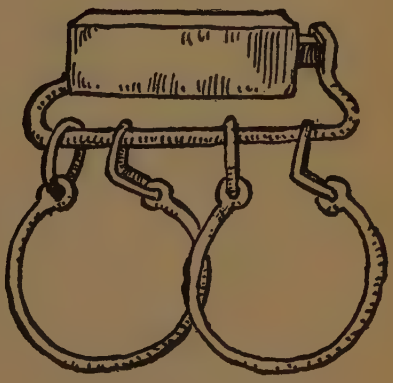


FIG. 65.—Handcuffs.

levers up the tumbler. The key is amusing as it can be worn on the finger as a ring.

Architects to-day are using wooden thumb latches for cottages, and it would be quite an interesting job for a boy to try his hand at inventing types of simple fastenings. He may be interested to see, in Fig. 67, how the Roman boy saved up his money in an earthenware pot that had to be broken before he could get at the contents.

In the N.W. part of the town at Silchester, there appear to have been dyers' workshops. Here were found remains of furnaces, built rather in the same way as old-fashioned brick-set coppers. Woad and madder were used by the dyers. The woad plant was cut up and washed, partly dried, and ground up into a paste, and allowed to ferment. This being formed into balls, was dried in the sun, and then being collected into heaps, fermented and became hot and fell into a powder. The roots of the madder plant were dried and ground into powder.

The fullers were important people with the Romans. First they had to deal with the new cloth. This was washed with fuller's-earth, to remove the oily matter in the wood of which most of the clothes were made; it was then stretched to

make it even, again washed to shrink it, carded to make the nap, and any inequalities being cut off, was finally pressed.

One of the fulleries at Pompeii has pictures showing the different processes. The white woollen cloth was bleached by being stretched over a frame, and subjected to the fumes of sulphur burning in a pot below. In Fig. 18 a fuller is shown walking over the bridge into the town, carrying one of these bleaching-frames.

The fullers also dealt with the cleansing of dirty clothes. According to Mau, soap was a Gallic invention which had only begun to come into use at the time of the destruction of Pompeii, so in the pictures to which we have referred, the fullers are shown at work doing the cleaning. The clothes were washed by being trodden in a vat by one man, as shown in Fig. 68, while his next-door neighbour did the rinsing. Fuller's-earth would have been used instead of soap, and the clothes given careful drying and brushing before they were sent home again. Fig. 69 shows a fuller's assistant demonstrating how, by their process of cleaning, old clothes become as good as new. In St. Mark ix. verse 3, we read, "And his raiment became shining, exceed-

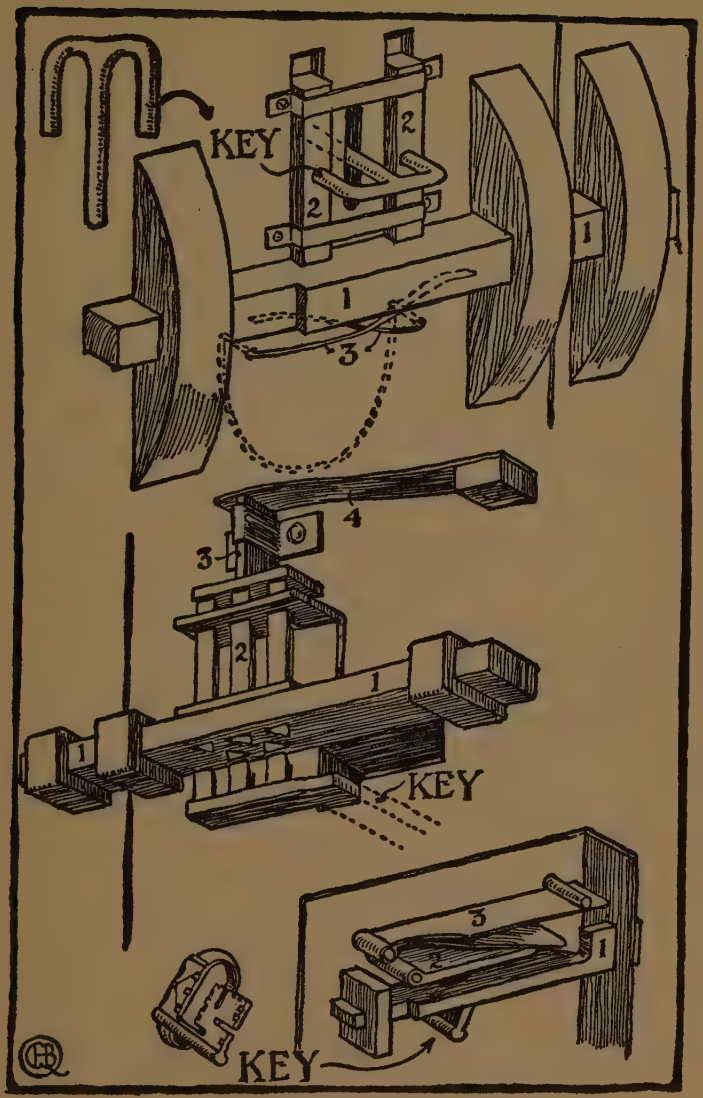


FIG. 66.—Locks and Keys.

ing white as snow; so as no fuller on earth can white them."

We know a small girl, who, being asked during a Scripture lesson what fuller reminded her of, answered chocolates, and so came to great distress. Our explanation may perhaps save others incurring, in sheer innocence, similar pains and penalties.

Vitruvius, in his tenth book, describes machines and engines, and it is obvious that the principle of the pulley was very well understood by the Romans. In a sepulchral relief of the Haterii, in the Lateran Museum (of which there is a cast in the Greek and Roman Life Room at the British Museum), there is shown an excellent representation of a crane, and this we have used as the basis for our drawing, Fig. 70. The power is here man-power, applied by a treadmill. Our drawing will show how the weight of the slaves would turn the wheels and so wind on to a drum between them the ropes, which, passing through pulleys, are attached to the stone to be lifted.

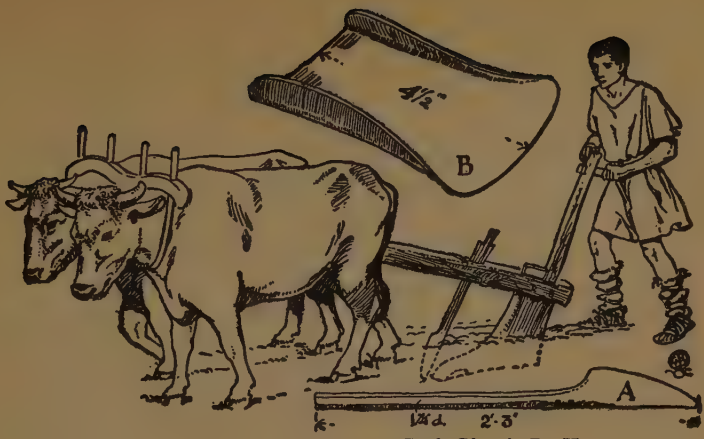
The tomb dates from the end of the first century, and is not so much a work of art, as an advertisement in stone of the doings of the family; the inclusion of the crane rather points to the Haterii

as having been successful building contractors, or, perhaps, crane makers.

The crane would not have offered any great difficulty to the Roman in its making. Vitruvius describes a taximeter, which, by an ingenious arrangement, dropped a pebble into a box for every mile of the journey, and a water-clock which was an improvement on that illustrated in Plate 2, Fig. 88. In the Roman one, water dripping into a reservoir raised a float which turned the dial-hands.

Fig. 71 shows some little knick-knacks.

We may now pause to think how this trade and industry was carried on. Orders could not all have been given by word of mouth. A tile was found at Silchester which had scratched on it, FECIT TVBVL(um) CLEMENTINVS (Clementinus made this box-tile); another had SATIS (enough), and there were other graffiti, as these scratchings are called. These must be accepted as evidence that tile and brickmakers at Silchester knew how to write, and, what is more, to do so in Latin. It is quite certain that the Romans did not import brickmakers, and that the Roman official did not make bricks for fun, any more than we should do this in India, for instance.



Early Plough, Pt. II. pp. 132, 179.

FIG. 63.—Plough.

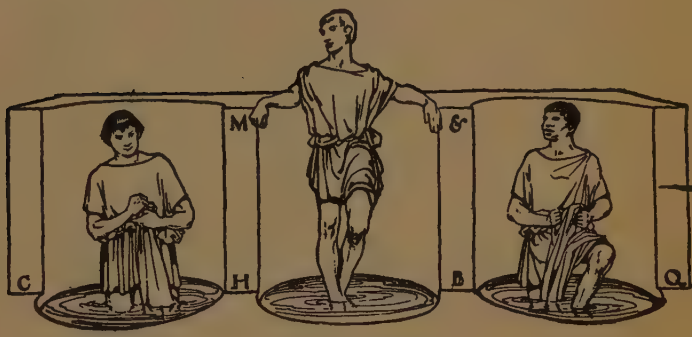


FIG. 68.—Fullers.

G. 64.—Padlock.

FIG. 67.
Money Pot.

Another point to remember is, that the Roman not only taught the Briton how to read and write but he settled the form of our own letters. He took the alphabet of the Dorian Greeks, and gradually developed it into the form of the Trajan Column lettering, shown in Fig. 72. Inscriptions cut in stone, of this character, have been found in Great Britain. Examples can be seen in the British Museum, and there is a very fine one on the front of a Roman tomb found in Westminster Abbey, which has been placed by the entrance to the Chapter House. During the last few years there has been a great improvement in our lettering, and good modern types have been very much influenced by that of the Trajan Column.

When our readers go to Rome they must not fail to see the Black Stone in the Forum, which is said to mark the Tomb of Romulus. A remarkable monument was discovered under this in 1901, and part of this is a pillar with an inscription of the sixth or fifth century B.C., the letters of which show a great resemblance to their Greek originals. By the end of the Republic the letters of inscriptions had become quite Roman in character.

In writing, we have the ordinary cursive, or

handwriting, which was used by the Silchester brickmakers in their scratchings on the tiles, or by authors for their manuscripts. This was influenced by the wax of the tablets on which it was scratched by the stilus. This made it rather angular, and it was just as varied as handwriting is to-day.

The scribes, who wrote out official decrees, or made fair copies of poems or histories, used what is called Bookhand, which, as one would expect, is more beautiful than the cursive. At first they employed a form of writing which consisted of what we should call capitals. From this they developed into what is called Uncial writing, where the forms were rounded, and so more suitable to the pen.

Silchester provides us with another illustration, and this time it is one which speaks of the city in its decay. A stone was found there with an Ogham inscription cut on it. Ogham writing is a very primitive arrangement of dots and dashes, which seems to have been invented in Ireland, and the Silchester inscription is thought to date from about the fifth century. This coupled with the burying of tools we noted on page 119, enables us to draw a picture of the deserted town falling into decay.

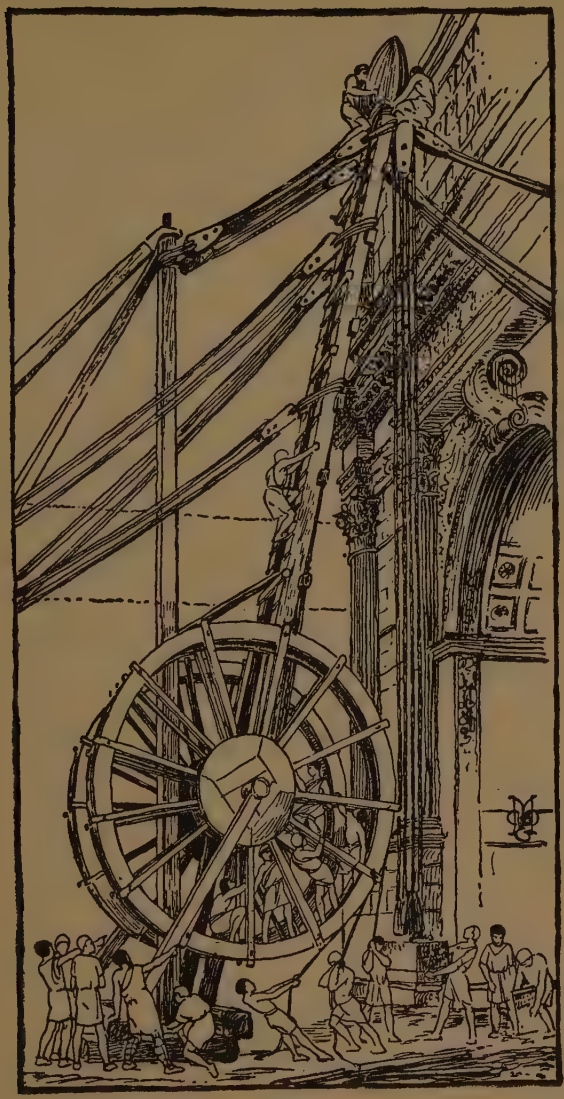


FIG. 70.—Crane.

Here, where the brickmakers at one time could scratch a Latin inscription on the wet clay of an unbaked tile, must have come, perhaps, a raiding Scot, whose only means of writing was this very primitive method.

Life and Death

Having seen something of the Trades and Industries which grew up around the Romano-British house, we can now turn to the life lived therein, and see how the Roman fashioned his soul. In one of the houses at Silchester an interesting discovery was made of what is thought to have been the Lararium, or chapel.

Roman religion centred around the house; there was the Lar, or Lares, the spirit or spirits of the house, and a small bronze statuette (Fig. 73), found at Silchester, may have been one of these. Cicero, in a speech of 57 B.C., said: "Is there anything more hallowed, is there anything more closely hedged about with every kind of sanctity than the home of each individual citizen? Therein he has his altars, his hearth, his household gods, his private worships, his rites and ceremonies." Vesta was the

spirit of the hearth, the Penates of the store closet, and Junus of the door. The father was the Paterfamilias, and acted as the priest, and his birthday was the festival of his Genius, or inspiring spirit.

There were gods of the city, and the Vestal Virgins guarded the hearth fire of the State in their house by the Roman Forum, and here Janus dwelt in the Gate. Jupiter was the God of Lightning, Juno of the Women, and Mars of War. The old Nature worship had developed, until almost everything had its spirit who must be propitiated by sacrifice. The spirits became more tangible and the gods more heroic, but they were feared and not loved. Instead of the Christian belief that man is made in the image of God, the old gods were made like man. What the Roman wanted was the protection of the gods for the safety of his family and the prosperity of his city. For this he was prepared to pay a price, in the sacrifice of the first-fruits of his crops, or by the life of his ox, pig and sheep; the god had the internal organs dedicated to him on the altar, and the flesh was eaten. What really counted was an elaborate ritual, which had to be followed with great particularity. Fig. 74 is of a Roman sacrifice.

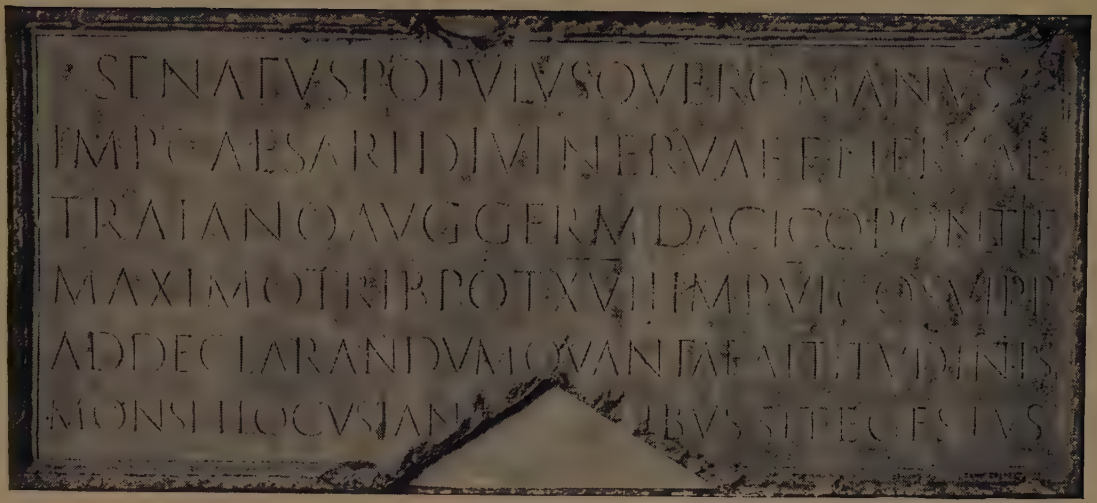


FIG. 72.—Lettering from Trajan's Column, Rome.

The Roman year was marked by a series of festivals at varying seasons. The Saturnalia, at sowing, from which many of our Christmas customs come; the Robigalia, for the aversion of mildew; the Ambarsalia, from which is derived Rogation-tide processions through the fields and the beating of bounds; and the Consualia at the harvest; and there were many others.

Augustus effected a great revival in Roman religion. It was about this time that we find the beginnings of Cæsar worship, which became general, and was adopted for political reasons. Here it was not the man so much as his Genius which was worshipped.

As the Roman Empire extended, many Oriental cults were grafted on to the body of her religion, as those of Isis and Mithras. The latter seems to have appealed especially to the soldiers, and part of its ritual consisted of the novice being initiated, and cleansed, by being baptized in the blood of a bull (Fig. 75). Mithras was worshipped in underground temples, of which there is a very interesting example in the undermost of the three churches which form S. Clemente in Rome. There are traces of a temple on our Hadrian's Wall.

Fig. 76 shows the solemn clasping of hands (*dextrarum iunctio*) which formed an important part in the Roman wedding. The *pronuba*, or matron friend of the bride, stands behind the bride and bridegroom, and the man holds the marriage contract in his left hand. After this, prayers were offered to the gods and sacrifice made to Jupiter. The bride, on the night before, had put off her girl's clothes and dedicated them, with her toys, to the Lares of her father's house. On the wedding morn she wore the *tunica recta* with a woollen girdle, on her head was a chaplet of flowers, her veil was flame-like, and her shoes were saffron-coloured.

Our space will not permit us to write of the very interesting ceremonies which were observed at the birth of a Roman, or of all the festivals observed at the various seasons of the year. So we must pass on to the final stage of all—Death. We have in these books paid considerable attention to the methods of burial, and this must be done, because it is a detail in the lives of man that is very indicative of the "fashion of the soul."

As far back as the Mousterian Man of the Old Stone Age (Part I., p. 95), we have found men burying their dead with varying ceremonial. In

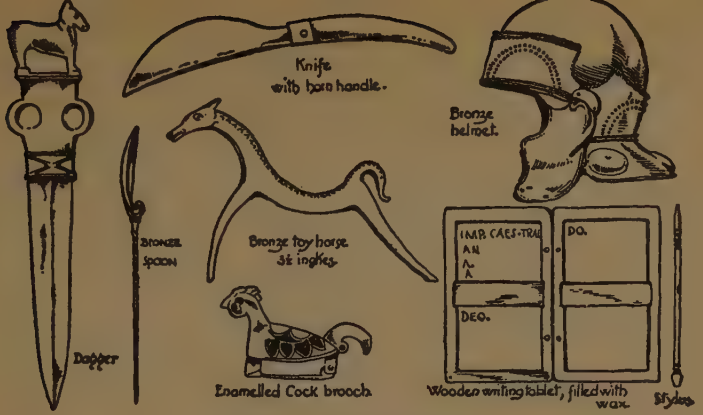


FIG. 71.—Knick-knacks.

FIG. 74.—Sacrifice.

FIG. 73.—Bronze figure from Silchester.

FIG. 75.—Mithras.

Roman times we find that burials, which were not allowed within the city walls, were placed instead along the roads leading to the town. At Silchester, Roman interments have been found at the side of the road leading to the North Gate. In early Roman times, burial was carried out by inhumation; that is, by placing the body in a coffin in a grave dug in the earth. This may be by reason of their association with the Etruscans, who are thought to have been of Mediterranean stock and so inclined to this method. Later, we find the Romans cremating or burning their dead, the ashes being disposed of in a variety of ways. Sometimes these were placed in glass jars, protected by being placed in leaden canisters; in other burials, pottery, or marble urns, were used for the same purpose. These were at times placed in graves, made in cist or boxlike form, of red tiles about 2 feet square by 3 inches thick. In these early cremations we find the old custom of burying articles for use in the spirit world: jugs, dishes, lamps, chairs, strigils, coins, mirrors, brooches, have all been found in England. As Christianity spread this changed, and the soul of the Christian was not thought to need so many aids. Burial

was now once again by means of inhumation in coffins of wood, stone, or lead, the latest ones lying E. and W., with the head at the W. In modern times cremation has again been introduced.

Funeral ceremonies were elaborate in Roman times, and Fig. 77 shows the burial of an important person of the time of Augustus. The dead body was laid out on the funeral bed in the house and dressed in the toga. Torches burned at the corners of the bed, and there were hired mourners; money was placed in the mouth of the corpse, in Pagan times, to pay for the spirit's journey. The procession was headed by musicians, followed by the hired mourners, then came the funeral bed in its litter, followed by the family. A halt was made at the Forum, and an oration delivered, and the procession would go to the place of burning without the walls, where the body, being placed on a pyre, was reduced to ashes, which were collected and placed in an urn.

Afterwards there was a funeral feast.

Fig. 78 shows the tombstone of Gaius Saufeius, who served for twenty-two years in the 9th Legion, and, dying at the age of forty, was buried at Lincoln. The tombstone is now in the British Mu-

FIG. 76.—Marriage.

Early Tombs, Pt. II. pp. 77–84, 136.

FIG. 78.—Tombstone.

seum, in the gallery on the ground floor, opposite the emperor he served. The extended inscription is:

C(AIO) SAVFEIO
C(AII) F(ILIO) FAB(IA) HER(ACLEA)
MILITI LEGIO(NIS) VIIII
ANNOR(VM) XXX STIP(ENDIORVM) XXII
H(IC) S(ITVS) E(ST).

From which we learn that Saufeius came from Heraclea in Macedonia, and belonged to the Fabian tribe; but there may be descendants of him in Lincoln to-day who have forgotten their ancestry.

Funeral monuments as that of the Haterii, from whence came the crane (Fig. 70), afforded the Roman opportunities for the display of portrait busts. As we look at these to-day, it is easy to see that the portraits were speaking likenesses. It is interesting to note that with the advent of Christianity the dead were shown in attitudes of peaceful repose, until, with the coming of the Renaissance, they sit up and begin to take notice once more as in Roman times.

CHAPTER IV

THE ARMY, AND TRAVEL BY LAND AND SEA

It would be well worth going to Rome, to see only the Column erected by Trajan to commemorate his victories over the Dacians. Here, in a sculptured band which ascends the shaft in a slow spiral, we see the Roman soldier at work, and his work is not only fighting; very much he appears to have been the handy man of the Empire, able to build a city, as well as destroy one. If we cannot go to Rome, there is a first-rate plaster model of the Column at the Victoria and Albert Museum, South Kensington.

During the first three centuries of the Empire, the army was divided into Legions and Auxiliaries —the former being the descendants of the early citizens and farmers who left the plough to fight, and Auxiliaries recruited from subject peoples. A

FIG. 77.—Roman Funeral.

Legion was known by a number, and equalled about 5000 heavy infantry, and 120 riders for dispatches and scouting. It was commanded by a senator, nominated by the Emperor as commander-in-chief (*Legatus Augusti legionis*), 6 military tribunes of high social rank, 60 centurions who equalled majors and captains and were promoted from the ranks, and other inferior officers. Legionaries served with the colours for twenty years, and received a bounty and land on discharge.

The Auxiliaries were divided into infantry cohorts of 500 to 1000 strong, and cavalry troops (*alæ*). They were commanded by Roman officers, præfects, or tribunes, and while their pay was less, their service was longer than the Legionaries; they received Roman citizenship on discharge.

The Emperor's Prætorian Guard was stationed in Rome, but the remainder of the army was on the frontiers; here the Legions stopped, and were not moved about. They were grouped with Auxiliaries, and commanded by the Governor of the Province.

The battles of the Empire were won by the Legionary, who threw his javelin, and then rushed into close quarters and fought with his short sword

(*gladius*), Fig. 80, which was a cut-and-thrust weapon. The Auxiliary cavalry operated on the wings, from which we get their name (*alæ*), and the Roman commanders do not appear to have wished to use them except in this way, of protecting the Legionaries, who delivered the main weight of the attack.

The tactics of this fighting at close quarters were to remain until the advent of the Martini-Henry rifle, issued to British troops in the 1870's, by its longer range, removed the combatants from one another, and altered the whole strategy of fighting. The musket was not very much more effective, so far as range was concerned, than the longbow, and so long as it remained in use, the problem which confronted the soldier was the same as in Roman times—so to discipline your men that they would endure punishment until the psychological moment when the "knock-out" could be administered.

If we kept a school, we should arm our pupils, with dummies, of course, and take them to the playing fields. We should insist that they threw the pilum and bent the bow. It might of course, pass from history into a joyous rag, but it would dent into their young minds at what short

Old Stone Age Spears, Pt. I pp. 77, 101, 105, 106.
New " " " Pt. II. p. 42.
Bronze Spears, pt. II. p. 112.

FIG. 80.—Legionary.

FIG. 79.—Mosaic Floor, Baths of Caracalla, Rome.

range men used to fight, when fighting was an art, and not a detestable science as now.

The pilum of the Legionary (Fig. 80) had an iron head fixed into a wood shaft, and the weight of the iron head kept the javelin in a straight line when it was thrown. We do not know what the range of the pilum was, but the Tasmanian could throw a wooden spear, nearly 12 feet long, and kill game at 40 to 50 yards. The notes on Fig. 80 will explain the remaining equipment of the Legionary. Fig. 82 shows the scale armour of bronze tinned, that was sometimes worn instead of the *lorica segmentata*, and Fig. 83 the *caliga*, or sandal. Fig. 81 shows the equipment of the centurion. Fig. 84 is a belt buckle found at Newstead.

Fig. 85 shows an Auxiliary, who wore only a leather jerkin, without body armour, an oval shield, and a longer sword, the *spatha*, as Fig. 86. The Auxiliaries, who are shown on Trajan's Column, wear the same dress whether fighting as cavalry or on foot. There were others, as the slingers and stone-throwers, shown in Fig. 87; the archer (Fig. 85); and the pioneer (Fig. 89), using his *dolabra*, a combination of pick and axe.

The soldiers were rewarded for acts of bravery. The officer has phaleræ on his breast, and torques taken from the neck of his enemy hang from his shoulders. Crowns were given as a reward: the *corona triumphalis* of bay for the *triumphator;* of oak leaves for saving the life of a comrade; in the form of a ship's prow for the first to board an enemy ship; as a city wall for the man who stormed walls; as a rampart for those who took camps; and of plain gold for pure bravery.

The ensigns were carried by men with a head-dress made of a lion's or leopard's skin. These served to mark the maniples, or units, of which the Legion was composed, and enabled the commanders to direct the movement of their men. The ensigns are shown in Fig. 90. Each Legion carried the eagle, which corresponded to our colours and to lose it was to ensure disgrace.

The troops were accompanied by a medical corps. On Trajan's Column a wounded Legionary is shown being assisted to a dressing station, where an Auxiliary is having his thigh bandaged in the modern way. At various points on the frontiers there were well-planned hospitals for sick troops.

The Legionary was aided by effective artillery.

Artillery is derived from a word which means to work with art, and doubtless the Roman did feel that his engines were works of art. They may have inherited the use of projectile-throwing engines from the Greeks, but these appear to have been in general use in the Near East after about 400 B.C. Vitruvius the architect, writing about the time of Augustus, gives descriptions and elaborate formulæ for the construction of Catapultæ, Scorpions, and Balistæ for throwing javelins and stones. Catapultæ are shown on the sculptures of the Trajan Column, and there is another on the tombstone, in the Vatican, of *C. Vedennius Moderatus*, who was an *architectus armamentarii* in the Imperial arsenal at the end of the first century A.D. From these sources there have been various reconstructions of these old engines, and those of Sir Ralph Payne-Gallwey, shown in his book, are of great interest, because he has made actual working models.

The first consideration of the Roman engineer was to remove his engine outside the range of the bow. This raises the question of the length of the bowshot. With the English longbow, the very longest range was 440 yards, but the archer of the

Trajan Column, in Fig. 88 is shown armed with a bow of the Turkish pattern, built up of horn and sinew, and there are accounts of shots of fabulous length with this. However that may be, the problem confronting the Roman engineer was not formidable, because it is obvious that the strength of the machine could very easily be made to exceed that of the man. Sir Ralph Payne-Gallwey succeeded in throwing a stone ball, 8 lbs. in weight, from 450 to 500 yards, and he only depended on rope skeins for his power. The Greeks and Romans possessed the art of making these with hair and gut, but it was lost during the dark ages, and in mediæval times the engineers depended on a counterpoised weight to throw the projectiles out of their trebuchets.

In classical times the power was obtained by torsion. Fig. 91 has been drawn from sculptures of the Trajan Column, and shows a catapult mounted on a small cart drawn by horses. The arms of the bow are composite, like the Turkish bow, and the ends are fitted into the skeins of hair or gut. The ends of these skeins were passed through holes bored in the frame and then into large wooden washers. The skein was then secured

Early Swords, Pt. II. pp. 113, 201.

FIG. 81.—Centurion.

FIG. 82.—Scale Armour (*Lorica squamata*).

FIG. 83.—Sandal (*caliga*).

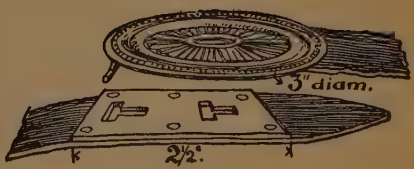


FIG. 84.—Belt Buckle.

by a pin going through the centre, and was tightened by hand-spikes fitted into holes in the edge of the washer, and secured from springing back by catches, as shown. The skein was further tightened, when the bowstring was drawn back, by the winch at the end. This pulled back the carrier in which the javelin rested, and the bowstring being released, the heavy javelin flew off, to come down into the besieged town. A variation of this engine for throwing stones was called the ballista.

The onager in the same way depended for its power on a twisted skein, which in this case was horizontal. This skein was tightened in one way by hand-spikes, as shown in Fig. 92, and in the other, when the arm was pulled down by the windlass. This arm was built up to make it resist the shock of being stopped against the cross-piece of the frame. The stone ball or rock, was placed in a leathern sling, and the trigger was a hook with an attachment by which it was pulled out of the ring on the arm. The stone ball, which was sent hurtling through the air, would have had sufficient force to crash through a roof.

The Romans also used the battering ram. In

its simplest form, as shown on the Trajan Column, it consisted of a heavy beam which was carried by several men, and the point banged against the wall. After some few stones had been dislodged from the face, the rubble interior would not have presented so much difficulty to the breaching party.

Vitruvius gives descriptions of more elaborate forms, where the ram was suspended from the roof of a hut, made to run on wheels, and covered with raw hides, and as the machine moved slowly, it was called the tortoise of the ram.

Movable towers were brought into use so that the besiegers could approach the walls of a beleaguered city and fire into it at more advantage than from on the ground; other movable huts were contrived so that the ditches in front of the walls could be filled up, and the engineers, crossing on the causeway so formed, could undermine the walls.

The people of to-day, who attempt reconstructions of these engines, are rather apt to provide their models with geared wheels enmeshed, the cogs of which could only have been cut on a machine; in our drawings we have suggested details which are much more home-made in character, and which the Legionary could have made quite easily when

he was far removed from his base; and we know, from the Trajan Column, that he was a very handy man.

Boys and girls will remember the dramatic part which catapults played in the destruction of Carthage. There was the mission of Cato to Carthage, in 157 B.C., from which he came back convinced that "Delenda est Carthago." Later the Consuls, from their camp at Utica, demanded the surrender of all the Carthaginian weapons, and 200,000 sets of weapons, with 2000 catapults from the walls, were surrendered. Then came the final order, that Carthage was to be destroyed, and any new town that was built must be ten miles from the sea. It is one of the most tragic tales of history, how the Carthaginians, finding that they had been betrayed, seized on the scanty time which elapsed before the Romans started the siege, to re-arm themselves; how new weapons and missiles were made from the iron and lead of the buildings, and the women cut off their hair to make skeins for new catapults. We cannot here tell of how the Carthaginians, behind their walls, maintained themselves against all the attempts of Scipio, until the last awful assault when the Romans cut their

way in, from wall to wall, through the houses, to save the risks of fighting in the narrow streets. Then the last scene of all, when the wife of Hasdrubal, cursing her husband for his cowardly escape, killed her two sons, and perished with their bodies in the flames, when the site of the town was obliterated by the plough and dedicated to the powers of the Underworld. It was all typical of the tough Roman spirit which would brook no rivals. If the drawings we have made of the war engines serve no other purpose than to invest the tale of Carthage with a new interest, and our readers with a determination to reconstruct on their own accounts, we shall be well repaid for our trouble.

We can now leave fighting and find out how the Legionary lived. The soldiers were quartered in forts, around which towns grew up; the Legions occupied the larger fortresses at some distance from the frontier, as at York, where they could march out to the support of the Auxiliaries who were manning the Wall. The country round supplied the cattle and corn.

As the Roman fort was just as carefully planned as the Roman town, it may be as well to describe it

FIG. 85.—An Auxiliary.

FIG. 86.—Swords.

FIG. 87.—Slingers and Stone Throwers.

here. The fort followed the same lines as the camp. When the Legion was on active service and camped for the night, it did so behind earthen walls of a regular pattern. Polybius has left a description of the Republican Camp, and Hyginus of that of the Empire, shown by Fig. 93. The Prætorium, where the tent of the commander was pitched, formed the centre of the camp, and around it were grouped the quarters of staff and bodyguard. At the back was a Forum where the soldiers could meet, and again behind this the Quæstorium, or paymaster's office. The Roman forts were provided with granaries to hold sufficient corn for a year, so that they could withstand siege. Tribute was based on property and a corn tax which went to feed the army. The forts were provided as well with baths. The street in front of the Prætorium was the Via Prætoria, and led to the Porta Prætoria (1). The street which went across the camp was the Via Principalis, and led from the Porta Principalis Sinistra (2), on one side, to the Porta Principalis Dextra (3), on the other. The tents of the Legionaries and their Auxiliaries were pitched in the vacant spaces between these. When a fort had to be built, as at Newstead near

Melrose, or on the Wall, the soldiers quite naturally built it in the form of the camp to which they were accustomed.

Hadrian's Wall was started about 124 A.D. The Wall proper was built of hewn stone, about 8 feet thick, and 18 feet high, and on the north side was a ditch; its appearance, from this side, would have been much the same as the wall round Silchester, shown in Fig. 15. There were some sixteen large forts in connection with the Wall, and at more frequent intervals, smaller forts (mile castles) and turrets.

Wherever the Romans went they carried with them their love of the games and here we would remind our readers that we shall obtain a very false perspective of history if we take our viewpoint from too modern an angle. We think of the doings of the Spanish Inquisition with horror, but Torquemada and Co. only adopted the usual methods of the secular courts of their time, the rack, pulley, and bucket of water, in their attempt to cure souls. In the same way we must remember that the *Meditations* of Marcus Aurelius, which have comforted many men since, were written by a man who must have attended the games. Originally these

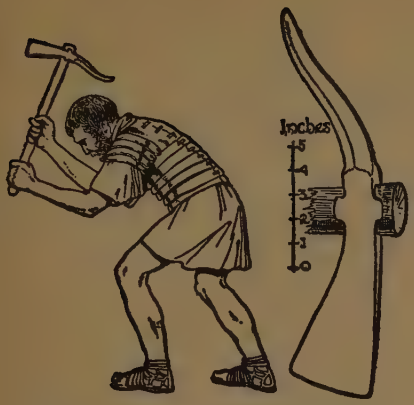


FIG. 89.—Pioneer's Axe (Dolabra).

FIG. 88.—Archer.

had formed part of religious ceremonies, and gladiators first appeared in the funeral games.

We have seen, by Fig. 15, that there was an amphitheatre at Silchester, and there was another at Dorchester, which we have shown in Fig. 94. Compared with the Colosseum, for example, these are simple constructions of earthen banks, but the displays given would have been much the same as those of Rome, though less elaborate.

Castor ware, which we have seen was an entirely British pottery, is sometimes decorated with gladiatorial combats. There is an ivory statuette of a gladiator in the British Museum, of the same type as shown in Fig. 95, and gladiators are shown in mosaic work at Bignor, Sussex. Beyond this we cannot go, and our readers if they like can people the amphitheatre we have shown. They can imagine the parade, and then the sham fight with blunt weapons, to be followed by the real thing. The gladiator, as Fig. 95, would not have fought against another armed in the same way, but would have been matched against the *retiarius*, armed with net, trident, and dagger. If the men held back, they were thrashed into the fight with whips. There must have been wary feints and

lunges, and then a slip, when the net was cast, and the fallen man was hopeless in its entangling folds; but not perhaps quite hopeless, because if he had fought well, he could appeal to the spectators, and be granted reprieve if they waved their handkerchiefs; but if the thumbs were turned down, then all that remained to the poor gladiator was one glance to where the bearers stood waiting with the bier for his dead body, before the dagger found a vulnerable spot, and his blood stained the sand. This may have happened at Silchester, and as we cannot all go to Rome and the Colosseum (though we must go if we can), thrills are still possible in England.

Fig. 96 has been drawn from the Ribchester helmet in the British Museum. This is made of thin bronze, and has a vizor modelled in the form of a face. An iron helmet of the same pattern was found at Newstead, and another of brass. It is thought that these helmets were used by the Celtic Auxiliaries in their games.

Mr. Curle, in his book on Newstead, gives an account of the sports and exercises indulged in by the Roman cavalry in the time of Hadrian. From this we find that the vizor helmets were used by the

FIG. 90.—Roman Soldiers Crossing a Bridge of Boats.

men when taking part in a tournament, and were crested with yellow plumes; they carried gaily decorated shields, and wore tunics, sometimes scarlet, or purple, and at others parti-coloured. Their horses were protected by frontlets and trappings from the showers of wooden spears which were discharged in the sham fights. Here is a pleasant picture of the Legionaries grouped around the lists, into which ride these very gorgeous horsemen, to go through their evolutions; it was not all work in remote Newstead.

As the history of Roman Britain depends largely on the Roman soldier, we can sketch it in very briefly here. The invasion of '43 was carried out by four Legions and Auxiliaries, in all probably about 40,000 men, and before the death of Claudius, the Romans had progressed as far W. as Exeter, and Shrewsbury, and up to the Humber. From that time to the building of the Wall by Hadrian to define the northern frontier, was the period of conquest, the principal dates of which are noted in the Chart.

The Romans penetrated into Scotland as early as the time of Agricola, but the N. of Britain never passed out of the soldiers' hands, and no towns or

villas were built to the N. of York, or beyond Shrewsbury and Exeter. The Second Legion was stationed at Caerleon, near Chepstow; the Twentieth at Chester, and the Ninth, and later the Sixth, at York. It is interesting to think of Britain, as being the N.W. Province of the Roman Empire, and needing as careful guarding as India in our own time.

Britain must have owed a great deal to the wise government of Agricola, of whom we hear in the writings of his son-in-law Tacitus. It is probably during this period, 78–85 A.D., that Silchester, Bath and Caerwent were commenced, and Latin began to be spoken, and the toga worn.

During the second century there were serious risings in the N., but the country on the whole was enjoying peace, and during the third century must have been very prosperous; after that began signs of the great upheaval which in the end was to overwhelm Rome. The English became troublesome, as early as 300 A.D., when the Saxon Shore was fortified against them. This was done by a series of Forts, built round the coast, from the Wash to Portsmouth. The ruins of many of these remain to-day, and one of the most interesting is that

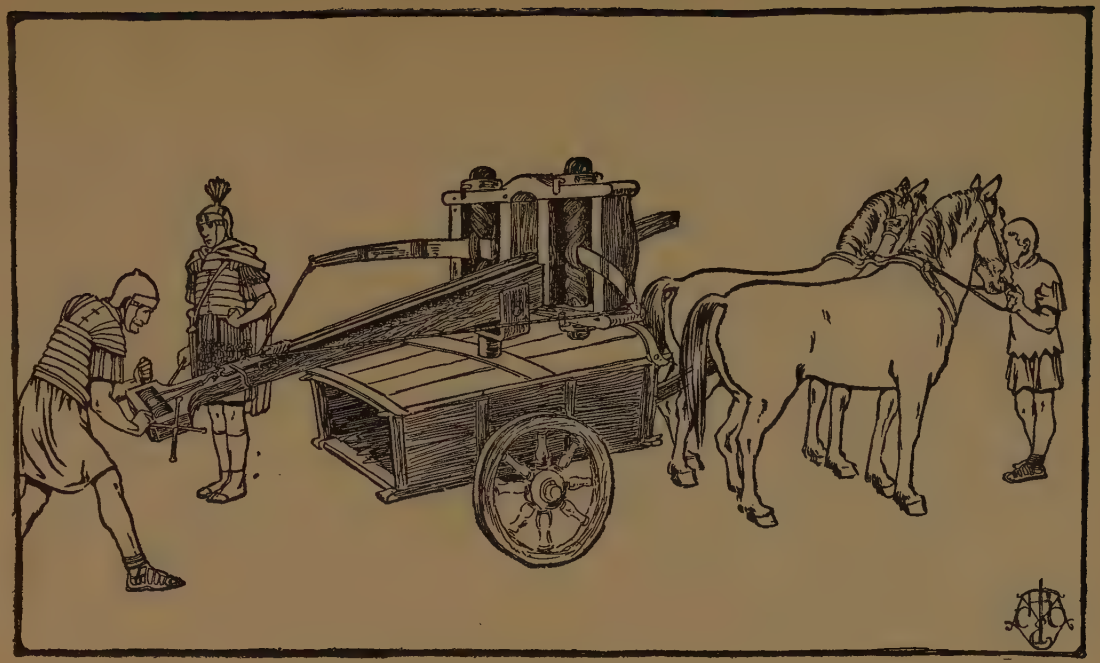


FIG. 91.—Roman Field Artillery. The Catapulta.

at Porchester. Here the Roman Walls enclose a Norman church, and castle keep which has later Gothic additions. From the old ramparts one looks out over the water of Portsmouth Harbour to the Royal Dockyard due S. So here in this one little spot is some 1100 years of architecture, and the Docks, with the Forts on the hills behind, are a reminder that watch and ward has been kept for over 1600 years, and you really cannot expect to find more than this on any summer's day visit.

There were migrations of Celts, from Ireland to Caledonia, who were oddly enough called, not Irish, but Scotti. The Picts became troublesome about 343, and with the Scotti raided into England. Men began to bury their tools and treasures as we have seen on page 119, and when hoards of coins are found, they are not, as a rule, dated later than 350–360.

It was about this time that the army was remodelled, and made more mobile, to meet the attacks of the Barbarians, with light troops, and more cavalry. The Governors were not trustworthy, and there were Dukes of Britain, Counts of Britain, and Counts of the Saxon Shore, in case one alone should aspire to be Emperor.

Now we must not think of Britain all this time, as having been occupied by a very large number of Romans, who kept the British in subjection. As the latter settled down to Roman rule, the true Romans could not have been more than the official classes, and the skeleton of the army. We must imagine the more experienced of these, being gradually recalled as the pressure on Rome increased. Many of the Britons were citizens of Rome, and looked on themselves as Romans; they did not stand on the cliffs at Dover, as the last boatload of Romans left, and cheer, thinking they had seen the last of their enemies. By this time they regarded themselves as Romans, and her enemies were theirs, and very terrible ones too.

The trouble started with a great stirring up of the peoples of the Central Asian plains. Driven perhaps by drought, the fierce and warlike Huns surged towards the Goths, whom they defeated. The vanquished moved across the Danube and Rhine, and, with the Huns behind them, were forced into the Roman Empire. Rome was captured and sacked, in 410, and the movement was not stopped until Attila, the King of the Huns, was defeated at Châlons in 451. By this time the

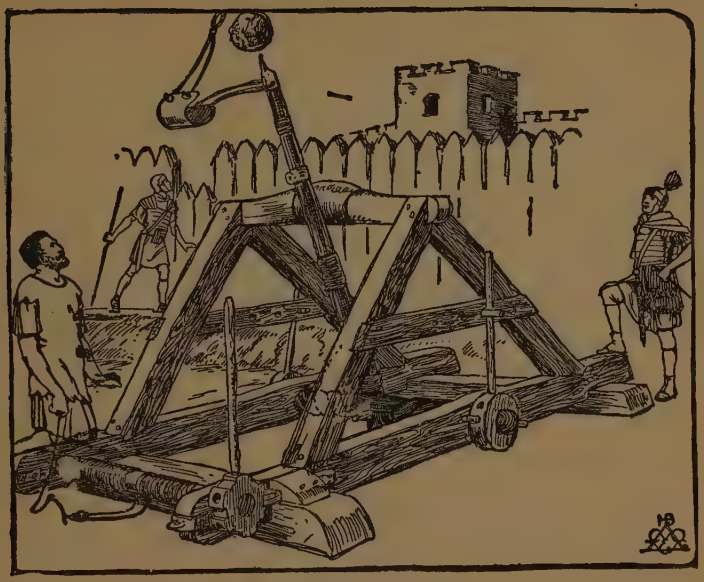
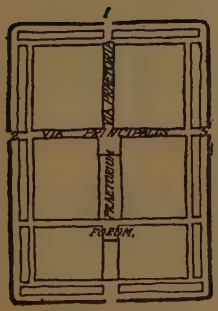


FIG. 92.—The Onager.



Early Camps,
Pt. II. p. 15.

FIG. 93.—Roman Camp described by Hyginus.

FIG. 95.—A Samnite Gladiator.

elaborate organization of the Empire had broken down, and Europe had entered into the Dark Ages.

Here in Britain we can imagine the Britons holding their own as best they could against their enemies, but being gradually forced into the west where they joined up with the Celts and settled down in a primitive environment. Those who did not fly would have been killed, or sold into slavery. The Jutes, the Angles and Saxons must have come up to a deserted Silchester, and have gaped at its wonders, as something entirely outside the range of their understanding in much the same way that an Australian native to-day would regard a stranded aëroplane. Britain and Europe were to wait for a thousand years before the ideas which Silchester expressed again became the thought of the day.

Having dealt with the Army and its bearing on British history, we can turn to the Navy, and just as the Roman generals did not rely on cavalry, so the Empire depended rather on the Legionary than on sea-power. The Roman Navy seems to have been used more for the purposes of transport than as an effective fighting force.

When we come to the Roman ship, we find that there is not much more known about it than the

Greek trireme; the writers were not sailors; the sculptors thought more of the design of their sculptures than the detail of the ships they were carving, and the sailors who did know neither wrote, nor drew. Fig. 97 of a Roman galley is based on those shown on Trajan's Column. We imagine that it would have been rowed in the same way as shown in Fig. 11. The prow is carried up in forecastle fashion, and at the stern is a Tilt. There are paintings at Pompeii showing galleys fitted with a mast and a square sail.

Fig. 98 is of a Roman merchant ship, and here again we have gone to the Trajan Column sculptures, assisted by Prof. Sottas' article in the *Mariner's Mirror*, on "The Ship of St. Paul's Last Voyage." This took place in 60 A.D., and is described by S. Luke in the 27th chapter of the Acts of the Apostles. This description is valuable, as showing the sizes, and general details, of the Roman ship at about the time when Britain was coming under the influence of Rome. We find that when the ship was caught in the easterly gale "we had much work to come by the boat," which had been in tow, and had to be hoisted on board; by "undergirding the ship" with ropes they added to

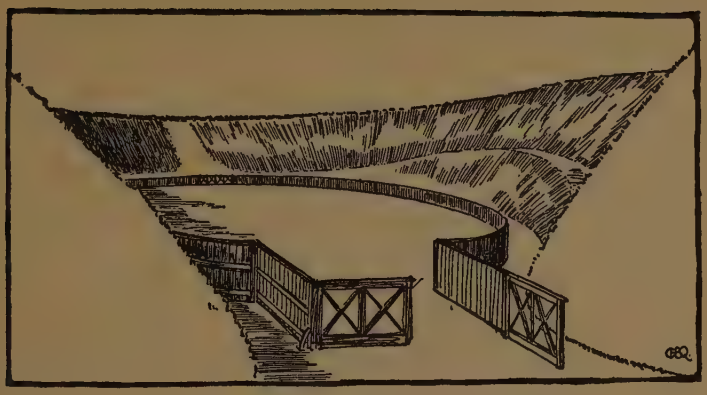


FIG. 94.—Amphitheatre at Dorchester.

FIG. 96.—Vizor Helmet.

its powers of resistance; "they lightened the ship; and the third day we cast out with our own hands the tackling of the ship." "When the fourteenth night was come," the water shoaled rapidly from 20 to 15 fathoms, so that "they cast four anchors out of the stern."

The sailors were made of poor stuff, because they were "about to flee out of the ship, when they had let down the boat into the sea, under colour as though they would have cast anchors out of the foreship." We find that there were "in all in the ship two hundred threescore and sixteen souls."

Prof. Sottas, in his article in the *Mariner's Mirror*, illustrates a model which he made of S. Paul's ship, based on the carving of a merchantman on a tomb at Pompeii, and another from Ostia, and these have many points of similarity with that of the ship on the Trajan Column. From these sources we find that the merchantman, or round ship, depended on its sails, and did not have oars like the galley; there was a tilt at the stern, with a gallery outside it, and another at the prow, with the crew's quarters behind in the forecastle. The mainsail and foresail were brailed up in a peculiar way, the sails were divided up into squares, with

leather strips, having eyes at the intersections, and through these, ropes were passed, and the sail drawn up rather like a blind.

Now we come to one of the facts which, we think, illustrates what the Roman occupation meant to this country—the *pharos*, or lighthouse, which they built at Dover. The foundations still remain, and in Fig. 99 we show a galley which has made the cross-channel trip at night, and reached the land safely. During the Middle Ages, the lighting of the coasts was regarded as an act of piety, and a few lights were maintained on church towers, but it was not until well on in the nineteenth century that any real progress was made. Here, as in so many other ways, the Romans anticipated what was necessary in a civilized state.

If we leave our ship on the coast, we need roads to travel by on land, and this was an especial need for the Romans with their huge Empire to administer. By the roads treasure was conveyed to Rome in sealed baskets, *fisci*, hence our word "fiscal." We are all of us far too ready to take things for granted; we walk on a Roman road, and are not thrilled; we may say, "Well, after all, it is only a road," and we forget the travellers who, through

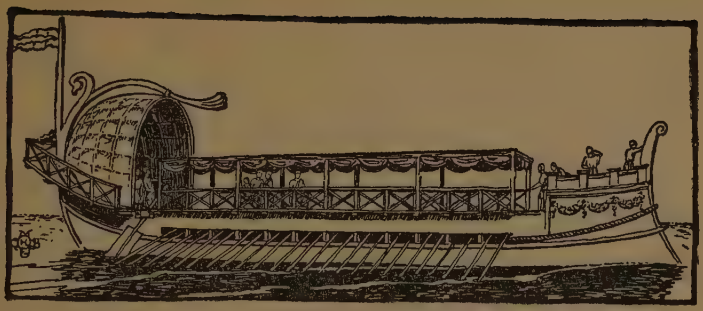


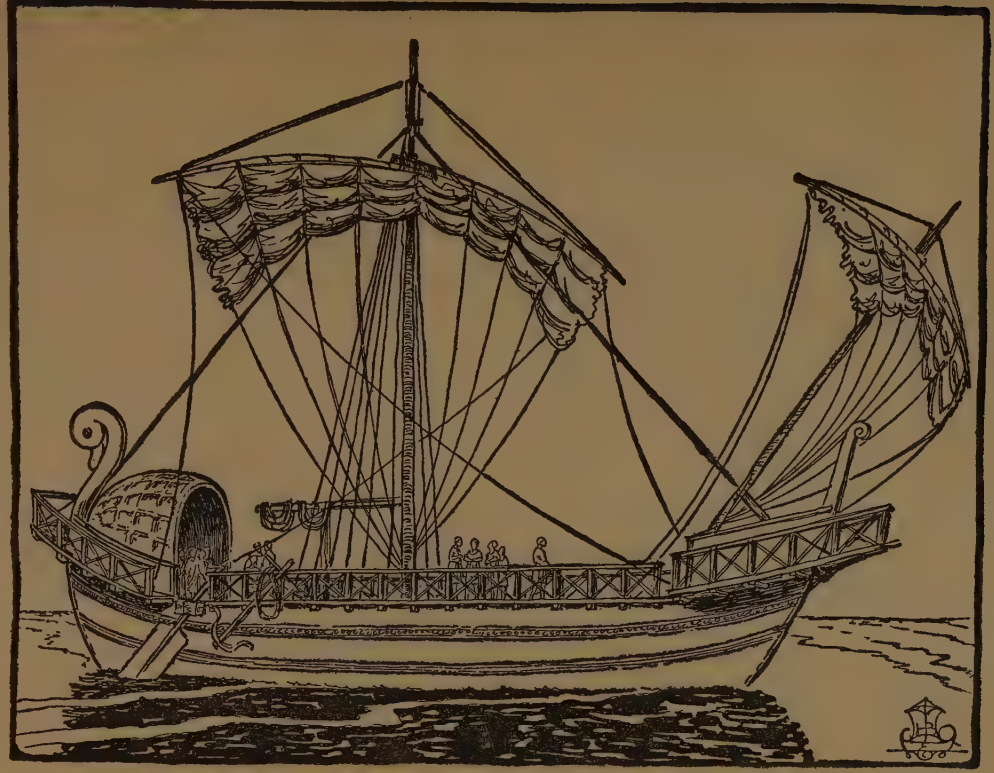
FIG. 97.—Roman Galley.

FIG. 100.—Roman Milestone.

all the centuries, have hurried along its surface. It is interesting to speculate why a road should be in the position we find it. The answer, that it serves to connect two towns, may not contain the whole essence of the matter, because we can go on to ask why the towns have grown up in these places. There must be certain ways up and down a country, but these would not be very useful unless they connected areas where men could grow corn, or cattle, or find iron and coal with which to work.

The Romans, when they came to Britain, introduced an entirely new method of living; the hilltops did not attract them, and they needed the fertile soil of the valleys for their scientific farming. A friend, who has lived many years in S. Africa, told us that he used to find pleasure in speculating how the country would be developed; in travelling he would come to a spot where the track was crossed by an easy way from a land where corn could be grown and carried to the sea, and it seemed to him just the place where a town would be built. The Romans were confronted with similar problems when they came to England, and it is a proof of their genius that during the nineteenth century, when we were planning railways many of these

followed the lines of Roman roads. Towns and cities had grown and developed in the places where the Romans had planned them. It is thought that they were the first to appreciate the possibilities of the site of London. If the capital city existed at all before their time, it can only have been as a port to S. Albans. We saw in Part II. that the Britons, before the time of the Romans, had a well-developed system of track-ways. We have shown these by dotted lines on our map (Fig. 3), so that their direction may be compared with the Roman roads. The Britons kept to the hilltops, because by so doing they avoided the undrained lowlands and forests. We must remember that iron, and sharp tools, were only introduced so late as 450 B.C. and very little headway could have been made in clearing the land for cultivation. We forget to-day what constant effort is needed to hold Nature in check, but a reminder can be seen at the Rothamsted Experimental Station, Harpenden, Herts. Here, some years ago, it was determined to leave untouched a piece of arable land and see what would happen. Gradually the weeds took possession, then bushes, and now large trees give the land the appearance of forest.



Primitive Boats, Pt. I, pp. 82, 113, 190. Pt. II. pp. 6, 179, 198.

FIG. 98.—Roman Merchant Ship.

Small wonder, then, that the Britons kept to the hilltops, and the adjacent slopes for their farming. Here it was that they obtained the skill to which Cæsar refers "from daily use and practice they become so expert that they are accustomed, on shelving and precipitous ground, to rein in their horses at full speed, and in an instant to check and wheel them."

When the Romans came, they had far better tools, and had learned how to multiply their effort by mechanical devices, like the crane shown in Fig. 70. They also saw that men could not always live on the hilltops, and that the fat lands of the valleys would be more productive when properly drained. Nothing is more expressive of the Roman genius than the Roman road. One of the most urgent questions to-day is the traffic problem, intensified by the coming of motor traffic. During the early part of the nineteenth century, we lost the road sense; railways began to carry men and goods about, and the roads fell into disuse. Worse still, the people had not any ideas of town-planning, so as the towns developed, hideous factories were built in the suburbs, and grouped around these were the back-to-back hovels of the workers;

the narrow mediæval lanes were not widened, and remain to-day as the bottle-necks which throttle the arterial roads. To-day one may drive through a maze of crooked lanes, until, turning into a great high road, the car settles down with a contented hum, the driver is happier, and every one much safer, because one is on a road designed some eighteen hundred years ago.

If we are motoring along a Roman road, it is noticeable that it goes in as straight a line as possible between the towns it connects, but if it is necessary to alter the direction this is done on high ground. This is thought to prove that the surveyors who laid out the roads in Roman times, did so by fires lighted on the hilltops. It would then be quite a simple matter to set out the intermediate points, sighting the flames by night, or the smoke by day.

When they came to the construction of the roads, the Romans very properly used local materials; stone in a stone country, and flint and gravel where these were found. It is a mistake to think that the Roman road was always paved with stone, but one outstanding feature is that the road was almost invariably raised up on a causeway. The country was not so well drained as it is to-day, and

FIG. 99.—Roman Lighthouse.

so the causeway would have kept the road dry in the bottoms, yet the Romans would repeat it over the top of a chalk Down.

On our map (Fig. 3) we have given an outline of what the principal authorities accept as the Roman road system; doubt is thrown on some, and archæologists are working at the subject, which is one that might well engage the interest of boys and girls in their own locality.

Fig. 100 is of the milestone in the Roman Britain Gallery at the British Museum. The Roman mile was 1617 yards in length, and this stone was set up 8 miles from Kanovium (Cærhyn, near Conway). Boys and girls should go and see the stone, because it is far more than so much stone; in front of it weary Legionaries have mopped their brows, or countrymen, as we have shown, stopped to spell out the Latin inscription. This is as follows:

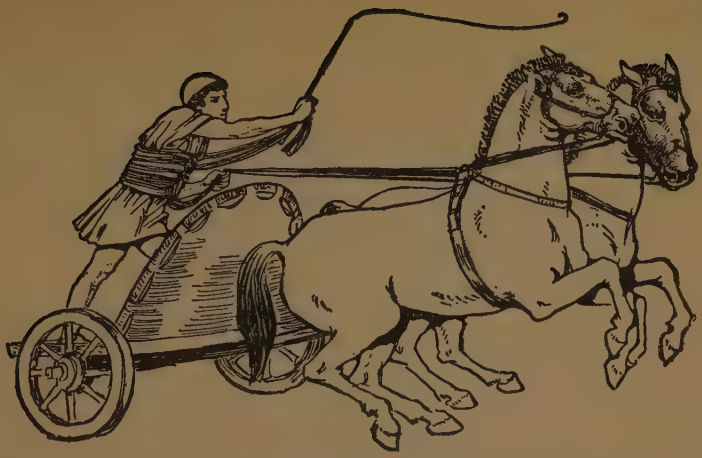
IMP . CAES . TRAI
ANVS . HADRIANVS
AVG . P . M . TR . P
. P . P . COS . III .
A . KANOVIO
. M . P . VIII .

This they would have extended to IMPERATOR CÆSAR TRAINVS HADRIANVS AVGVSTVS, PONTIFEX MAXIMVS, TRIBVNICIA POTESTATE. . . . PATER PATRIÆ, CONSVL III, A KANOVIO MILLIA PASSVVM VIII. The *British Museum Guide* points out that these are the titles of the Emperor Hadrian, and his third consulate dated from 119, but as the year of his tribunician power is uncertain, the inscription can only be dated between A.D. 119 and 138.

It must be remembered that our Roman roads were only a part of the system which radiated all over the Empire. Augustus set up a Golden Milestone in the Forum at Rome, on which the distances to the principal cities of the Empire, were given. He also set up a regular state post by which dispatches could be carried.

The Romans used various types of vehicles. There was the *lectica*, or litter, like the eighteenth-century sedan chair; the *ræda*, a four-wheeled waggon used when a number of people wanted to travel or luggage had to be carried. For faster travelling there were two-wheeled carts covered with a tilt and drawn by a mule.

Fig. 101 shows a pair-horse chariot which would



Early Iron Age Chariot, Pt. II. Frontispiece.

FIG. 101.—Racing Chariot.

Early Bits, Pt. II. pp. 118, 126.

FIG. 102.—Bridle Bit from Newstead.

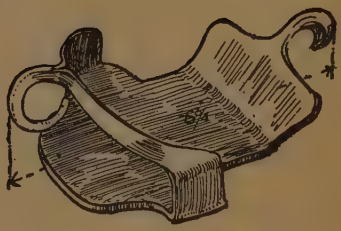
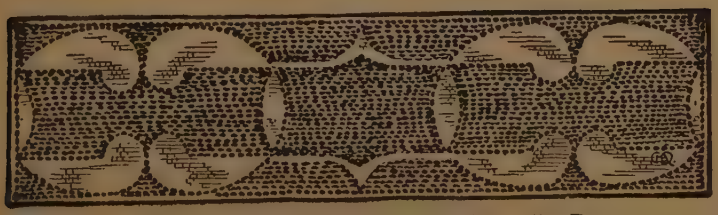


FIG. 103.—Hipposandal.



Roman Mosaic Floor—Baths of Caracalla, Rome.

have been used for racing or as a sporting conveyance.

The bridle bit (Fig. 102) was found at Newstead, and Fig. 103 is what is called a hipposandal, at the British Museum. Ordinary horse-shoes were known to the Romans, but smiths may have been few and far between. These hipposandals may have been used to tie on to the horses' hoofs as shoes when the farmer wanted to take his horses on to the hard roads, in much the same way as a horse wears shoes to prevent his feet cutting the turf when pulling a mowing machine.

CHAPTER V

FINALE

HAVING seen something of the work of the Romans, we will attempt to find out how it was possible for them to do so much. All their work reflects their sense of Law and Order. A thing must be properly planned, and seen to be logical, before it is carried out. They lacked the Celtic touch of imagination, which rather likes pier-head jumps, and gets out of tight corners by flashes of inspiration. The Roman way was to settle their difficulties beforehand.

If we look into their history, we find that their training was just such as was admirable for the training of soldiers, administrators, and traders. They were an Aryan-speaking people, who had found their way down into Italy from the N. When they founded Rome in 753 B.C., they had the Etruscans for neighbours in Tuscany, with the

Ligurians to the N., and the Greek Colonies to the S. The early government of families ruled by patres, or fathers who met together in the Senate, was able to accommodate itself to the long struggle with the Plebs, and in fact grow strong on it. The Republic was founded in 509 B.C., and by 300 B.C. the Patricians and Plebs had equal rights in justice, and the struggle was carried out by constitutional means.

The Romans, who were to rule the world, first learned to rule themselves, and in so doing, were led to one of their greatest accomplishments, the building up of a system of Law, and the acceptance of it by the people, as something which was just and by which they were prepared to shape their lives.

Notwithstanding all this, Rome might have remained as a second-rate provincial power, had not her destiny forced her to expand, and take up her inheritance in the Near East.

Rome was mistress of all Southern Italy, and the Greek cities, with the defeat of Pyrrhus in 275 B.C.

When Scipio defeated Hannibal in 202 B.C., Rome became a great naval state, had added Spain

to her possessions, and was mistress of the Mediterranean. Yet the seeds of decay were sown; it did not pay to grow corn when it came as tribute from Africa and Sicily, or to work when slaves were cheap.

In the Macedonian Wars, Rome started a series of victories by which she acquired the empire of Alexander the Great. Carthage was destroyed, and Rome by now was mistress of the civilized world. These Eastern victories must have had a tremendous influence on Rome. In Greece they found wonderful architecture, sculpture, and a literature which has never been surpassed. In Babylonia, as they gazed at the evidences of incredibly ancient civilizations, the Romans must have fancied they had conquered time itself. Small wonder, then, if they lost their heads, and, departing from the simple ways of their ancestors, forsook the plough for the palace, and instead of working for the good of the State, desired riches, and trafficked in "Honours" for themselves.

A state of affairs grew up when the Senate was greedy for power; the Laws had to be made before the assemblies of the people, and they were kept in good humour by presents of corn, and the gladiator-

ial fights in the arena. The traders amassed wealth by employing slaves who, chained together in gangs, carried out all the work. The descendants of the farmers, who had left the plough to fight, and then returned home to work, often found, on their return, that they were in debt, and so drifted into the towns, to live idly, or become soldiers. A miserable state of affairs came about, which resulted in the Social and Civil Wars, 90 B.C., and the revolt of the gladiators under Spartacus, 73 B.C.

Here we come to an extraordinarily interesting period of Rome's history; she had conquered the Near East, and that was the end of it, because there was no work to be done there. Egypt, Babylonia, and Greece were all infinitely old and tired, and Rome could not teach them anything. They doubtless looked on Rome as something too vigorous and vulgar for any words and only asked to be left alone to dream of the past. It was almost as if the Oxford of to-day could be invaded by a mob of barbarians, and told to get-on or get-out. Imagination just boggles at what would happen.

From Rome's point of view it was not so much Cæsar and Augustus who stopped the rot and gave

her a new lease of life, as the large field of Western Europe to which she now turned. Here were peoples who could be taught. We have seen in Part II. that the Britons were not just so many woad-stained savages, but they were of course far behind the Romans, so we must imagine them keeping a watchful eye on the roads and towns we have been writing about and picking up ideas meanwhile.

In our Introduction we pointed out that historians must depend on other historians, or the evidence to be found in the work of people, and we think that the latter method gives a fairer idea of Roman civilization than the former.

Literary evidence is apt to be somewhat overcoloured; the writer searches for the extraordinary individual, rather than the everyday man and his doings; the heroes are so incredibly heroic that we despair of ever resembling them, and the sinner so sinful that we shudder. This is very much the case with Roman history, and we are at a loss to understand how it was that Rome carried on her work.

It is rather as if we formed a judgment of our own times on the evidence of newspaper posters, be-

cause judged by them it would seem that we lived by murder, and yet man cannot live by murder alone.

We know that this is not the case, and that the life of the people is carried on by the effort of the ordinary decent man and woman, who builds and bakes, farms and fiddles, eats, drinks, dresses, and in the end dies, without saying very much about it. It must have been much the same in the days of Rome, because it is evident that, even if she was rotten at the core, she still had good men who could carry on her work in the provinces.

Another thing which makes work so attractive a guide to the historian, is, that there are only three kinds. These are good, bad, and the work of genius, which, in some incredible way, is just a little better than good. Again, work is subjected to laws, like mathematics, and cannot lie, while lies are compounded of words. If there is one thing which man has invented, which lends itself to being twisted into a hundred different meanings, it is the written word.

Another trait of the Romans was their wonderful knack of getting things done. It is quite wrong to dismiss all their effort, by saying that matters

were simple for them because they had slaves; in our own time we have discovered the use of machines equal to myriads of slaves, but it has not as yet resolved our effort into works comparable with the Romans, but among our readers there may be a boy who will build for eternity. Such a boy will find that when he comes down to the real thing, that work itself is divided into two parts: the first part of designing, and the second of translating the design into the material of which it is to be constructed; and the second part, calling as it does for the work of many men together, is often more difficult than the first.

We are, of course, apt to forget the long time the Romans took to work out their destiny, but in our own country, from the reconnaissance of Julius Cæsar in 55 B.C., to the end of the time of the Roman influence, say about 410 A.D., 465 years elapsed, which from our own days would take us back to the Wars of the Roses, and the building of King's College Chapel at Cambridge, or a world which would be stranger to us than Roman Silchester.

It is a curious fact that our problems to-day find their closest parallel with those of Rome.

Finale

The dole and football are fearfully like Bread and the Games, and our hope, like Rome, is in founding colonies where men may find work.

In the Middle Ages, life and thought were as closely walled in as an old castle, whereas in Roman times men moved about more freely than at any time before the railways came; and in moving about and rubbing shoulders with the people they conquered, the Romans were continually being refreshed by grafts on to the original stock.

The slaves became freedmen, and engaging in trade became proud of it, and joined themselves together into colleges or guilds, and were responsible for many developments during the Empire.

Wealth was spent in public works; it was held to be creditable to decorate your city with beautiful buildings, and to support the Games.

It is very evident that the Romans enjoyed their lives on earth, and above all things they desired to be remembered by those they left behind them. Terrible were the penalties for those who desecrated a burial-place, and very elaborate the precautions which were taken that it should never be destroyed. Those who were poor banded themselves together in Burial Clubs, that their ashes

should have seemly burial, and that flowers should be placed on their graves on their birthday. It was rather on the happy day on which they entered the world, than the dismal one on which they left it, that they wished to be remembered.

Virgil, who died in 19 B.C., wrote the *Æneid* towards the close of his life, and though it is largely founded on the *Iliad*, can be taken as representing the outlook of the Roman on the next life at this period. Charon, the ferryman of the dead, takes passengers across the Styx, who look behind them regretfully, rather than ahead with hope, and landing in the Underworld, must pass Cerberus, to be judged by Minos. The wicked go to a prison set in the midst of fire, and the heroes to the groves of Elysium, there to pass a happy life doing much the same that they did on earth, but the half heroic, after a period of purgatorial purification, await the call of destiny to another life on earth.

The later philosophers saved the soul through reason, but the philosophy developed into religion, and became more spiritual, until the doctrines of Mithras arose with many resemblances to Christianity. Sir Samuel Dill's books should be read for the spiritual developments of the Empire.

Finale

We have said that the supreme accomplishment of the Romans was the system of Law which they evolved, and that their sense of law and order was reflected in their work. We might reflect for a moment, on the long struggle which civilized man has had with his fellows, in trying to overcome their untidy and ugly habits. If we go to Nature, we shall find that both the mud-flat and the mountain-top are beautiful in themselves; it is only when man trails across them that we can mark his tracks by the tin cans he leaves behind him. There can be no doubt that the ordinary man is an untidy person with a rather slovenly brain. From the days of the Mousterian Cave Dwellers, we showed in Fig. 29, Part I., up to a Bank Holiday crowd of our own time there have been people who left litter behind them for other people to clear up. It was the Romans who gathered together the ideas of sanitation and health, town-planning and orderliness in the arrangements of our cities, and started on the gigantic task of trying to make man tidy.

It is quite possible that Rome fell in the end, because the Barbarians, finding that they had become strong enough, and becoming enraged at the orderly Roman spirit, rose up and fell on

Rome, that they might henceforth be allowed to be untidy.

But Rome did not fall, and still lives, because Rome was not a name, or a people, or soldiers, or sailors, so much as an idea of living, which still influences us. When the Barbarians got to work, they made a sad mess of carrying on Rome's work.

The walled cities fell into disrepair, or were used as quarries; the sewers were clogged, to the detriment of health and happiness; houses ceased to be heated, except by open fires, which must have smoked with every puff of wind through the unglazed windows.

At Silchester we gaze at a life which we can understand, and then the time curtains are pulled across the scene, and gloom descends with the Dark Ages.

We very much hope that our book will encourage boys and girls to study Roman work on their own account, because it is an extraordinary period in our history. If they will go to some of the places we have pictured, Bath, for instance, and then realize that it was to take more than 600 years after the end of the Roman influence, before the coming of the Normans, and Norman building,

they will realize what a tremendous check it was to civilization when the Barbarians burst their bounds.

Norman architecture was developed out of a hotch-potch of Roman forms, whence its other name of Romanesque. The Normans threw vaults across their churches, which were timid imitations of those of the Romans, and these were the forerunners of the later glorious Gothic vaults.

In the fifteenth and sixteenth centuries there was the Renaissance, or rebirth of the old classical ideas, and men found that the practical genius of the old Romans had provided them with a quarry, in which they could dig, and find materials for the works they wished to carry out. Roads, buildings, town planning, everywhere were suggestions that were found to be good.

In the eighteenth century there was a revival of Greek architectural forms, but these were not found to be suitable for modern conditions. The great contribution of the Greeks was the Temple, and this, translated into a Park Lodge, for example, was tragic. In the nineteenth century there was a Gothic Revival, but a nineteenth-century "Gothic" church, built at so many pounds a

sitting, turned out to be an industrial horror entirely lacking the soul of the old work.

Now men have turned to Rome once again, and there is hardly any building being done to-day which is not based on the teaching of Rome. The French were saved many of the architectural horrors that attacked the English in the nineteenth century, because their students at the Beaux-Arts in Paris, and the Académie de France at Rome, never lost their hold on the teaching of Rome. The Americans very wisely went to Paris for their architectural training, which is one of the reasons they are now doing such fine work. So Rome's work is not done yet, if we are still benefiting by her ideas.

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